3rd National Annual Conference

of

Stillbirth Society of India

SBSICON 2025

Theme: Pathways to Prevention – Learning from Loss

RRR

Raising Awareness | Reducing Risk | Restoring Hope

Dates : 29th – 31st August, 2025

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SOUVENIR

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From the Desk of the Organising Chairperson

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Vice-President, Stillbirth Society of India.
Chair, Committee for Study of Stillbirths from Rh-Sensitization, SBSI

It is with immense pride and heartfelt commitment that I welcome you all to the 3rd Annual Conference of the Stillbirth Society of India, hosted at SGPGIMS, Lucknow.

As the Organising Chairperson, I am deeply honoured to bring together leading clinicians, researchers, public health experts, and bereaved families in a shared mission to confront one of the most silent tragedies in maternal and child health. This conference is not just a scientific gathering—it is a platform for advocacy, empathy, and action. Through robust dialogue, evidence-based sessions, and collaborative workshops, we aim to illuminate the path toward prevention, respectful care, and policy reform.

I extend my sincere gratitude to every delegate, speaker, and partner who has joined us in this vital journey. Together, let us transform grief into purpose and silence into solutions.

From the Desk of the Organising Secretaries

Dr. Nalni Tandon
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Dr. Asna Beg Ashraf
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Founder Joint Secretary, Stillbirth Society of India. Chair, Digital Education Committee, SBSI

It is with great honour and heartfelt purpose that we welcome you to the 3rd National Conference of the Stillbirth Society of India, in the historic city of Lucknow.

This gathering is not merely a scientific meeting—it is a space where compassion meets commitment, data meets dedication, and every story of loss inspires action. Our theme this year, ***"Pathways to Prevention: Learning from Loss,"*** reminds us that while stillbirth remains one of the most under- recognized public health challenges, it can also be the most preventable one. Each case is more than a statistic—it is a heartbeat that once echoed with hope, a family's grief, a mother's silent sorrow, and a call for us to do better.

This conference brings together clinicians, primary care givers, researchers and policymakers united by the belief that change is possible. In the coming days, as we exchange knowledge, share experiences, and strengthen collaborations, let us keep empathy at the heart of every conversation and evidence at the core of every decision. May our collective efforts translate into meaningful action so that fewer families in the future must bear the pain of a loss that could have been prevented.

'Together, let us transform loss into learning, and learning into lasting change.'

Message From the President, SBSI

Dr.(Prof.) Neelam Aggarwal
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Professor, Obgyn (Superannuated), PGIMER, Chandigarh
Nodal Officer, WHO-SEARO multi centric stillbirth surveillance at PGIMER (2011-24)
Contributor MoH Operational guidelines on Stillbirth review (Released July, 2025)

It is with great pride and deep purpose that I welcome you to the third annual conference of the Stillbirth Society of India at Lucknow. Our theme this year, "Pathways to Prevention: Learning from Loss," reflects our shared commitment to transforming heartbreak into hope. Each story of loss teaches us something invaluable—guiding our research, shaping our practices, and strengthening our resolve to prevent future stillbirths.

Stillbirth remains a silent public health crisis, and every loss is a call to action. Yet, within each family's story, there is also the potential for progress—insights that can shape research, influence policy, and improve care. This conference brings together a community of committed professionals, researchers, parents, and advocates who understand that prevention is possible—and urgent.

As we gather to share data, dialogue, and experiences, let us remain grounded in empathy and driven by evidence. May our collective efforts over these few days move us closer to a future where fewer families must walk the path of loss.

Message From the Vice-President, SBSI

Dr.(Prof.) Mandakini Pradhan
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Vice-President, Stillbirth Society of India.
Chair, Committee for Study of Stillbirths from Rh-Sensitization, SBSI

It is both a privilege and a solemn responsibility to serve as the Vice President of the Stillbirth Society of India. Stillbirth remains one of the most under-recognized public health challenges in our country, and yet, it is one that we can—and must—address with urgency and empathy.

Let us continue to advocate for better preconception and antenatal surveillance, equitable maternal care, and culturally sensitive bereavement support. Let us invest in research that saves lives and policies that honour every loss. And above all, let us remember that behind every statistic is a story—a family, a name, a love that endures. Together, we can transform grief into action and silence into progress.

With deep respect and solidarity,

Dr. Mandakini Pradhan

Message From the Founder Secretary SBSI

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Founder Secretary, Stillbirth Society of India

Reflections on Death Before Birth – The Journey of the Stillbirth Society of India

Breaking the Silence Around Stillbirth

Stillbirth remains one of the most neglected tragedies in global health. Behind the statistics are silent stories of grief—families who prepared to welcome a child, only to return home with empty arms. According to the World Health Organization, 14 babies per 1,000 births are stillborn worldwide—a devastating reality that means one stillborn baby every 16 seconds. Put another way:

'Eight babies die every two minutes before taking their first breath.'

These are not just numbers. They are lives lost, dreams interrupted, and futures that will never be. For the mothers, fathers, and families affected, the impact is lifelong. India bears one of the highest burdens of stillbirths globally. Yet for decades, the issue was absent from policy priorities, research agendas, and public discourse.

It was this void—this urgent need for recognition, action, and compassion—that led to the birth of the Stillbirth Society of India (SBSI).

The society was formed when seven like-minded obstetricians: Tamkin, Asna, Shipra, Deepika, Ayesha, Nafees and Bushra joined hands. And today, we have more than 200 members.

"Our Mission: Pathways to Prevention, Learning from Loss"

The Spark: From Global Calls to a National Movement

The idea for SBSI took root after a landmark *Lancet* series on stillbirths, which was accompanied by an unprecedented global advocacy campaign. The *Lancet*'s work, coupled with the World Health Organization's call for countries to publish stillbirth data, brought long-overdue visibility to the issue. In India, these developments were a wake-up call. We could no longer accept stillbirth as an unchangeable reality. The need for a dedicated platform—bringing together healthcare professionals, researchers, policymakers, and bereaved families—became clear. After months of dialogue, planning, and groundwork, the Stillbirth Society of India was officially registered on 11 February 2021.

From its inception, SBSI has been driven by a mission to-

- Reduce the incidence and impact of stillbirth in India through awareness, research, education, advocacy, and support.
- Prevent as many stillbirths as possible, particularly those occurring after 28 weeks of gestation, by promoting early identification of high-risk pregnancies and timely interventions.
- Improve bereavement care, ensuring that families receive compassionate, respectful, and culturally sensitive support at every step.

Our guiding principle is simple yet powerful:

'Stillbirth is not inevitable. Most cases can be prevented with skilled care, timely action, and collective will.'

Milestones Along the Way:

In just four years, SBSI has grown into a vibrant, multi-disciplinary movement, marked by several key achievements-

1. Awareness and Education:Our inaugural meeting on 13 August 2021 set the tone for our work: evidence-based, inclusive, and action-oriented. Since then, SBSI has hosted regular webinars featuring national and international experts, ensuring that best practices in prevention and care are widely shared.
2. Collaborations:We have built strong partnerships with organisations such as FOGSI, ISOPARB, the Indian Society of Paediatrics, RCOG-India, and numerous state-level OBGYN societies—expanding our reach and amplifying our message.
3. Publications and Resources:Our regular e-newsletters, consensus statements like the 'Safe Baby Bundle,' and IEC materials have equipped healthcare workers with tools to save lives and provide respectful bereavement care.
4. Conferences and Policy Advocacy:Annual conferences have become a cornerstone of our work. From Chandigarh in 2023 to Hyderabad in 2024, each SBSICON has brought together hundreds of delegates. The 'Hyderabad Declaration', endorsed by leading health bodies, was a major policy milestone.
5. Training and Capacity Building:Through our 'Bereavement Care Training Workshops'—often using the *Theatre of the Oppressed* methodology—we have trained more than 400 participants in cities including Chandigarh, Hyderabad, Jaipur, and Indore.

The Heart of Our Work: Human Stories: At the core of SBSI's mission are the families who have endured the unimaginable. We hold close the words-

"A mother is not defined by the presence of a child by her side —but by the love she holds in her heart."

We remember every mother who carried her baby to term, only to return home without them. Their stories are the heartbeat of our movement, fuelling our determination to prevent future losses and to ensure that bereavement care is compassionate, personalised, and culturally sensitive.

SBSICON 2025 – Pathways to Prevention, Learning from Loss: This year's conference in Lucknow marks our third national gathering—a moment to reflect, learn, and recommit. The theme, "Pathways to Prevention – Learning from Loss," embodies the dual purpose of our mission: to reduce the risk of stillbirth while restoring hope to

those affected. Over three days, delegates will engage in workshops, panel discussions, and keynote sessions covering:

- Antenatal and intrapartum care innovations.
- The role of ultrasound, genetics, and pathology in prevention.
- Bereavement care strategies grounded in empathy and evidence.
- Policy pathways to accelerate action.

Beyond the scientific programme, SBSICON 2025 is also a space for creative expression and healing. Our Call for Art Submissions—*Reflections on Stillbirth*—invites participants to honour loss through painting, poetry, photography, and prose.

Looking Ahead: Our Roadmap for Change

SBSI's future is ambitious yet deeply practical. In the coming years, we aim to:

- Expand membership and establish city chapters for localised action.
- Advocate for legislative change to improve stillbirth reporting, prevention, and bereavement care.
- Launch parent support groups and Rainbow Clinics to guide families through subsequent pregnancies.
- Promote large-scale research and publications to close knowledge gaps and influence policy.

A Call to Action

Our journey so far has been one of courage, collaboration, and compassion. We have broken the silence, built alliances, influenced policy, and trained caregivers. Yet, our work is far from over. Stillbirth is not a private tragedy—it is a public health priority. We must all act: healthcare providers, policymakers, community leaders, and citizens alike. As we gather for SBSICON 2025, let us remember:

Every stillbirth is one too many!!!	**Bereavement care is a moral obligation**	**Prevention is possible!!!**

"Yesterday is gone. Tomorrow has not yet come. We have only today—let us begin."

From the Editor's Pen

Dr.(Prof.) Ayesha Ahmad
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Professor, Department of Obstetrics & CIMSH, Lucknow. Founder Joint Secretary, Stillbirth Society of India, Secretary Committee for Study of Stillbirths From FGR.

As I sit down to write these words, I find myself reflecting on the journey that has brought us here—together, under one roof, bound by a cause that is as profound as it is painful. Stillbirth is not just a medical term; it is a silence that echoes in empty cradles, a story left unfinished, a grief that lingers quietly in countless homes. For those of us who have listened to these stories, comforted these families, or walked this journey ourselves, the work we do is not just professional—it is deeply personal.

When the Stillbirth Society of India was born, it was with the simple but urgent need to break the silence. What began with a few voices has now become a chorus, growing stronger with each conference, each workshop, each shared experience. To see this Souvenir in your hands is a reminder that we are no longer alone in this mission.

This collection is more than scientific articles—it is a space where empathy meets evidence, where stories inspire action, and where loss is honoured with dignity. Every contributor here has, in their own way, chosen to give meaning to loss by creating pathways of hope.

May this Souvenir be a gentle reminder that while we cannot rewrite every story of loss, we can choose to ensure that fewer such stories are written in the future.

Reducing Stillbirths and Hypoxic Injuries Through Reflection and Resetting our Obstetric Care

Dr. Edwin Chandraharan

Edwin graduated from Kasturba Medical College, Manipal and did his postgraduate training in Obgyn (Master of Surgery) in Sri Lanka and in the UK (MRCOG). He pioneered physiological interpretation of CTG in 2006, which resulted in several hospitals demonstrating 50% reduction in the rate of HIE and emergency caesarean sections. Edwin developed the "HAEMOSTASIS" Algorithm for Massive PPH in 2005 and the Triple P Procedure for placenta accreta spectrum disorders in 2012, and he is passionate about preventing avoidable harm to women and babies by adhering to the principles of evidence-based medicine and reflective practice. He is an accredited Obstetric Expert Witness and has appeared in Coroner's Court, Magistrates and High Courts and the Royal Courts of Justice.

At the outset, I would like to congratulate the Stillbirth Society of India for their hard work, dedication and passion to reduce stillbirths and to prevent avoidable harm to babies, women and families in India, and to the organising committee of SBSICON 2025 for kindly inviting me to contribute this article for publication in the Conference Proceedings.

The theme of SBSICON 2025 conference *"Pathways to Prevention: Learning from Loss"*, in my opinion, should act as a timely "wakeup call" to all healthcare providers caring for women and babies during pregnancy and childbirth, not only in India, but also in the rest of the globe. It is an undeniable fact that stillbirths occur due to a complex interplay of antepartum, intrapartum, socio economic, cultural, and environmental factors as well as changing maternal demographics, co-morbidities and lifestyle choices. It is also an equally undeniable fact that several babies are continuing to die or survive with learning difficulties or severe neurological injuries as a result of substandard care. These deaths are not solely due to adverse social economic factors as illustrated by repetitive "Each Baby Counts" Reports published by the Royal College of Obstetricians and Gynaecologists (RCOG) in the UK (a "G7 advanced" economy) between 2015 and 2020 highlighting that over 70% intrapartum related stillbirths and severe hypoxic ischemic brain injuries were due to substandard care, and > 50% of these serious adverse outcomes were related issues

with cardiotocograph (CTG) interpretation[1-4]. Therefore, the vast majority these intrapartum care - related stillbirths can be prevented by implementing effective pathways for prevention and learning from loss: the theme of SBSICON 2025.

For the purpose understanding the root causes of our current predicament regarding our own contribution to avoidable harm to mothers and babies, I have taken the liberty to reverse the Theme of SBSICON 2025 by addressing "Learning from Loss" first, followed by "Pathways of Prevention"

"Learning From Loss": an Honest and a True Reflection of our Own Clinical Practice: Clinical medicine mandates evidence-based clinical practice, based on logic and scientific principles which underpin clinical care provided to patients. However, obstetric practice relating to intrapartum care, very unfortunately, has predominantly relied on mimicking and repeating the practise of our senior colleagues as well as historical beliefs which were not founded on scientific principles. Therefore, we need to urgently reflect and address following practices which have caused avoidable harm to women and babies:

Illogical Classification of Cardiotocograph (CTG) Traces Into "Normal, Suspicious, Pathological": Introduction of CTG into clinical practise in 1968 without any robust scientific studies or randomised controlled trials (RCTs) resulted senior obstetricians from some national societies inventing CTG guidelines based on their own personal opinions without any scientific basis[5-9]. Four features of the fetal heart rate (baseline, variability, accelerations, and decelerations) were randomly selected, and illogical and unscientific time limits (e.g., 30 minutes, 40 minutes and 90 minutes) were applied to consider whether a particular feature was deemed "reassuring", "non-reassuring" or "abnormal"[5,6]. These arbitrarily chosen time limits were blindly applied to all human fetuses (term, preterm, post-term, as well as fetuses with intrauterine growth restriction, intrauterine infections, and those who were exposed to adverse maternal environment such as gestational diabetes mellitus, pre-eclampsia, immunological disorders), leading to avoidable harm[8,10]. The concept of individualization of care which is the cornerstone of clinical medicine was entirely

overlooked by those who produced these CTG guidelines, and by those who blindly followed them.

Illogical Classification of Normal Physiological Fetal Compensatory Responses as "Pathological": Fetal heart rate decelerations are normal reflex cardioprotective responses to compensate for transient, and intermittent interruption of oxygenation (umbilical cord compression or uteroplacental insufficiency secondary to progressively increasing uterine contractions during labour)[11-13]. Despite scientific evidence confirming since 1996 that even repetitive late decelerations were associated with a false positive rate of 99.8%[14], several CTG guidelines attempted to classify the CTG traces based on the observed morphology of decelerations into "suspicious" or "pathological"[5,6,15]. This nonsensical approach of classifying normal fetal physiological compensatory responses as "pathological" resulted in an exponentially increase in the rates of emergency caesarean sections worldwide, and their resultant complications (postpartum haemorrhage, uterine rupture, would infections and sepsis, venous thromboembolism, and placenta accreta spectrum disorders), resulting in serious maternal mobility and mortality. Conversely, fetuses who were unable to mount "large and ugly" decelerations (e.g., intrauterine growth restriction, chorioamnionitis, and feto-maternal haemorrhage) were misclassified as "normal" or "suspicious" resulting in avoidable stillbirths and severe neurological injuries.

Illogical Use of Fetal Heart Rate Parameters To Define Normality: The National Institute of Health and Care Excellence (NICE) in the UK incorrectly recommended a baseline fetal heart rate range of 110-160 bpm to be used at all gestational ages[5,6,15], despite the scientific knowledge and published evidence indicating that due to the progressive maturation of the parasympathetic nervous system, the upper limit of the fetal heart rate should be reduced to 140 bpm after 40 weeks of gestation. The failure to adhere to basic scientific principles and using a wrong cut off of 160 bpm even after 40 weeks of gestation resulted in the misdiagnosis and misclassification of fetuses with chorioamnionitis and chronic hypoxia as "normal" increasing the risk of stillbirths and neurological injuries.

Due to some bizarre and hitherto inexplicable reasons, the NICE CTG guideline also increased the upper limit of the baseline fetal heart rate to 180 bpm from 160 bpm to be considered as "abnormal"[5,6], contrary to all other international and national CTG guidelines which had defined abnormal fetal heart rate (fetal tachycardia) as > 160 bpm, based on scientific evidence. This dangerous increase of the upper limit resulted in fetuses with chorioamnionitis, chronic hypoxia and intrauterine growth restriction being missed as they did not have sufficient reserves to increase their baseline heart rate > 180 bpm to be considered as "abnormal". Similarly, contrary to basic principles of clinical medicine, the same guideline defined normal baseline fetal heart rate variability as > 5 bpm instead of 5-25 bpm, resulting in fetuses with "ZigZag" patterns (baseline variability > 25 bpm) secondary to rapidly evolving hypoxic stress or chorioamnionitis[13,16,17], being erroneously misclassified as "normal". This illogical and dangerous approach of altering the normal ranges of human parameters, contributed to increased risk of stillbirths and severe neurological injuries.

Illogical Treatment of the Wrong Patient (i.e. Mother) With Oral or Intravenous Fluids: Several CTG guidelines erroneously recommended administration of oral or intravenous fluids to the wrong patient (i.e. the mother) with the mistaken belief that it would immediately increase the volume of the amniotic fluid, resulting in reduced umbilical cord compression and disappearance of ongoing decelerations. All undergraduate and postgraduate trainees in obstetrics learnt that the plasma volume during pregnancy increases by 50%. Therefore, it is not surprising that a UK national report in 2019 highlighted not only avoidable maternal harm due to maternal hyponatremia, pulmonary oedema and admission to intensive care units, but also neonatal convulsions due to dilutional hyponatremia following the administration of intravenous fluids to treat perceived CTG abnormalities[18]. Despite scientific publications highlighting the dangers of administering fluid to the mother to correct CTG abnormalities in the absence of maternal hypovolemia, hypotension (e.g. sepsis) or dehydration in 2020[19], in the UK this Illogical unscientific practice was very sadly continued from 2001 and 2022. Moreover, administering intravenous fluids to CTG traces with subclinical chorioamnionitis which were misclassified as

"suspicious" resulted in a false sense of security and delays in accomplishing births, increasing the likelihood of stillbirths and severe neurological injuries.

Illogical Treatment of the Wrong Patient (i.e., The Mother) With Oxygen: All undergraduate and postgraduate students in obstetrics are aware that the normal maternal oxygen saturation is 98-100%, and the normal fetal oxygen saturation at term is approximately 60 to 70%[20]. This is because the fetus exists in a relatively hypoxic intrauterine environment which is devoid of atmospheric oxygen. Therefore, unless the maternal oxygen saturation drops drastically below the normal fetal oxygen saturation (70%), fetal hypoxia and acidosis are very unlikely to occur due to the presence of fetal haemoglobin[19]. Moreover, it has been taught in medical schools that if human beings are exposed to excessive oxygen, then, this hyperbaric oxygen would lead to the production of damaging oxygen-free radicals and induce vasospasm as a protective mechanism. Therefore, based on a Cochrane Systematic Review[21] which concluded that there was a significant increase in the rate of neonatal metabolic acidosis if maternal oxygenation is carried out in the presence of normal maternal oxygen saturation, this illogical historical obstetric practise was stopped by most obstetricians from early 2000s. However, some obstetricians continue to administer maternal oxygen even in 2025 despite the knowledge that doing so may increase the likelihood of fetal neurological injury due to the vasospasm of the maternal arterioles supplying the placenal bed as well as production of oxygen free radicals which may damage the developing fetal brain.

Illogical Assessment of the Wrong Tissue (i.e., Skin of the Fetal Scalp): In medical schools obstetricians were taught that skin is a peripheral non-essential tissue which undergoes catecholamine-induced vasoconstriction in hypoxic stress to enable centralisation of blood flow to ensure oxygenation of central organs. Therefore, during hypoxic stress it is normal to have increased lactate and low pH in the skin as oxygenated blood is diverted to the central organs. Regrettably, several obstetricians and guidelines erroneously believed that taking a sample of capillary blood from the fetal scalp (fetal blood sampling or FBS) reflected the oxygenation of fetal brain because the scalp was closer to the brain. Despite repeated Cochrane Reviews[22,23] and publications highlighting the dangers of FBS[24,25], and despite a multicentre trial

suggesting increased caesarean section rate[26], FBS was continued in the UK from 2001 until 2022. Several babies, especially those with ongoing chorioamnionitis, were at the risk of neurological injuries and stillbirths due to the false negative rate, whilst mothers were subjected to unnecessary intrapartum caesarean sections.

Pathways to Prevention: Resetting of Obstetric Care: A true and deep reflection of our existing intrapartum care and practices which increase the risk of unacceptable and avoidable harm to women and babies should help us to immediately reset our obstetric care by reverting to evidence based clinical practise which is underpinned by logic and sound scientific principles taught in medical schools. This does not require additional financial resources or high-tech equipment, but it requires going back to the very basics of anatomy, physiology, biochemistry and founding principles of clinical medicine. I would like to challenge every attendee of SBSICON 2025 with three "Resets" as they return from the conference to their own "labour wards", "labour rooms", "delivery suites" or "birthing suites" by going back to basics.

Reset 1: Back to Basics of Individualization of Care: We should stop using arbitrary, non-evidence-based parameters to classify CTG traces into "normal", "suspicious", "pathological", and start implementing the principles of fetal pathophysiological interpretation of fetal heart rate traces as recommended by international expert consensus guidelines on physiological interpretation of CTG traces produced by over 50 CTG experts from more than 20 countries[27]. The use of tools such as *"Is this foetus fit to undertake the progressive hypoxic journey of labour?"* at the beginning of labour, and *"How is THIS fetus?"* during labour will help us to individualise care and to treat each fetus as a human being with unique physiological reserves, with a specific clinical context according to the exposure to their own maternal and intrauterine environments[28].

Reset 2: Back to Basics of oxytocin vs oxytoXin use: Injudicious use of oxytocin can lead to serious maternal (uterine rupture, atonic postpartum haemorrhage, amniotic fluid embolism), and fetal (HIE, neonatal death, trauma from operative births) complications. Publications from the UK and Sweden have concluded that injudicious use of oxytocin was associated with cerebral palsy in approximately 50% and 70%

cases, respectively[29]. One of the main reasons for these iatrogenic fetal brain damage and deaths was the disregard of the basic knowledge gained from medical school that contraction of any muscle has four main properties: frequency, duration, strength, and the basal tone. Illogically, several guidelines erroneously defined uterine hyperstimulation as > 5 or 6 contractions in 10 minutes, thereby disregarding the detrimental effects of increased duration, strength and the basal tone of the uterus in between the uterine contractions. Moreover, the basic knowledge of myometrial physiology that there is a progressive increase in the number of oxytocin receptors at the uterine fundus as the labour advances was also disregarded, and recommendations were made to continuously increase the rate of oxytocin infusion despite progressively increasing sensitivity of the myometrium to circulating oxytocin. This unphysiological approach resulted in excessive contraction of the myometrium due to the iatrogenic conversion of oxytocin to **oxyTOXIN** resulting in harm to the mother (emergency section in late labour due to myometrial lactic acidosis, and resultant poor progress and atonic postpartum haemorrhage) and to the fetus (HIE, and intrapartum related deaths).

In order to avoid these pitfalls, frontline clinicians must use the definition of hyperstimulation recommended by the international expert consensus guidelines on physiological interpretation of CTG: ***any increase in uterine activity (i.e., frequency, duration, strength, and the basal tone in between the contractions) associated with abnormal fetal heart rate changes***[27,30]. In addition, the progress of labour should not be assessed solely based on the observed number of uterine contractions on the tocograph. Instead, progress of labour should be determined based on the rate of cervical dilatation, effacement, descent, flexion and rotation of the presenting part, and if such evidence of progress is observed, then, the rate of ongoing oxytocin infusion should be reduced or stopped to avoid the iatrogenic conversion of oxytocin to oxyTOXIN. Tocolytics must be administered immediately, if there are features suggestive of compensation of the fetal central nervous system on the CTG trace[31-34].

Reset 3. Back to Basics of avoiding of, and timely recognition and evidence-based management of chorioamnionitis: In healthcare facilities where vaginal

prostaglandins are available to induce labour, the ongoing historical practice of artificial separation of membranes (ASOM or "membrane sweep"), which results in the introduction of both aerobic and anaerobic bacteria adjacent to the amniotic membranes, breaching the cervical mucus and other natural defence mechanisms[35], must be immediately stopped. The Cochrane systematic reviews have suggested that the efficacy of the "membrane sweep" was approximately only 20%[36], however, with a low certainty of evidence of benefit[37], which is much lower than the efficacy of vaginal prostaglandins which are inserted onto the posterior fornix, and not through the cervical canal.

Similarly, chorioamnionitis should not be diagnosed based on the presence of decelerations or maternal tachycardia and pyrexia because approximately 80% of mothers would not show any clinical signs or symptoms in an ascending infection[38-40]. This is because the bacteria and the toxins are present within the amniotic cavity and the fetal compartment and not within the maternal compartment. Fetal systemic inflammatory response (FIRS) is not associated with repetitive umbilical cord compression or structural uteroplacental insufficiency, and therefore, repetitive decelerations would be absent on the CTG trace[39,40]. It is important to recognise the features of the "Chorio Duck Score" to timely recognise ongoing chorioamnionitis[40]. Recent scientific evidence has confirmed that features of neuroinflammation as recommended by the international expert consensus guidelines on Physiological interpretation of CTG was associated with approximately 4-fold increase in interleukin-6 (IL-6) levels in the umbilical artery at birth[41]. Therefore, if CTG features suggestive fetal inflammation (SOFI) are observed, then, birth must be expedited to avoid superimposed hypoxic stress which has been shown to exponentially increase the risk of neurological injury in fetuses who are already primed with bacterial toxins. Oxytocin must not be used in the presence of ongoing chorioamnionitis.

Implementation of "Pathways to Prevention: Learning from Loss": India is blessed with a "Stillbirth Society" which is dedicated to reduce stillbirths and avoidable harm, comprising of hardworking members who have a strong academic focus. Postgraduate trainees, student midwives and nurses, who are the clinical leaders of

the future, have a tremendous responsibility on their shoulders to correct the errors of the past. The future clinical leaders of tomorrow have a duty and responsibility to implement evidence based intrapartum care, which is firmly founded on scientific principles, today. Not least because the babies being cared for during labour, may be so close to ourselves in the future, because their mothers may be our own daughters, daughters-in-law, sisters, cousins or close friends.

SBSICON 2025 is being held in the month of the Indian Independence Day, and Mahatma Gandhi once said" *First they ignore you, then they laugh at you, then they attack you, and finally you win*". Fighting the British Empire would have seemed an impossible task to many, and so many patriots would have experienced unfair attacks, ridicule, imprisonment and incarceration. However, they persisted, and India turned the perceived impossible dream into reality on 15 August 1947. Similarly, the journey of challenging entrenched historical obstetric practices to improve outcomes for mothers and babies will involve risks to those attempting to optimise intrapartum care. These attacks may include you being laughed at, your characters and careers being attacked, and several obstacles being placed by a hierarchical system. However, your reward of seeing many children, who would have otherwise died or severely damaged, enjoying a fulfilling life with their families due to the avoidance of the errors in the past, would make all these challenges worthwhile. This Is exactly what Mahatma Gandhi meant when he said, "and finally, you WIN".

I sincerely hope SBSICON 2025 represents a watershed moment in reducing stillbirths and avoidable poor maternal and fetal outcomes in India and also this conference acts as a catalyst of change for optimising intrapartum obstetric practice across the globe. If the delegates who attend SBSICON 2025 truly reflect on the contributory causes of avoidable harm, and with humility accept the need for change, and then immediately implement an evidence-based intrapartum care firmly founded on scientific principles in their places of clinical practice, then, outcomes will definitively change, very rapidly. India can become a success story, and a world leader not only in commerce and information technology, but also in evidence-based intrapartum care.

Let the "Pathways to Prevention" commence with reflecting on our own past clinical practice and ensuring that our daily clinical practice is fully aligned with the scientific principles we learnt at our medical schools.

I wish you a successful, enjoyable, rewarding, informative, and practice-changing SBSICON 2025.

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'I speak your name, I light a candle, I remember.....
and in that, you live

The Unseen Lens: Understanding the Role and Uptake of Perinatal Autopsy in India

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Introduction: In the quiet aftermath of stillbirth or early neonatal death, grief often blends with uncertainty. For families, the question of "why" lingers unanswered. For clinicians, the absence of definitive insight can stall efforts to improve care. In this context, perinatal autopsy emerges not merely as a diagnostic tool, but as an ethical and clinical imperative. It holds the promise of clarity, closure, and progress. Furthermore, autopsy findings serve as a powerful tool for institutional learning. When systematically integrated into perinatal mortality reviews, they can highlight gaps in antenatal care, diagnostic services, or delivery practices—thereby offering data-driven avenues for quality improvement.[1]

Yet in India—a country grappling with one of the world's highest perinatal mortality rates—perinatal autopsy remains chronically underutilized. Despite its potential to transform perinatal care through better diagnostics, counselling, and systemic improvement, uptake remains low across most regions. Understanding the reasons behind this phenomenon requires not only attention to infrastructural gaps, but a

deeper interrogation of cultural, emotional, institutional, and economic dimensions that influence both health professionals and bereaved families.

Why Perinatal Autopsy Matters: A perinatal autopsy refers to the detailed postmortem examination of a fetus or neonate who dies in the late stages of pregnancy or soon after birth. It helps in finding the cause of death, detects undiagnosed congenital anomalies, provides genetic insights, and assists in family counselling for future pregnancies. In many cases, the autopsy not only explains the cause of death but also reveals previously unsuspected conditions that have implications for parental health or recurrence risk.[2] Its benefits span multiple levels:

- Diagnostic clarity: Autopsies can confirm or revise suspected causes of death, reveal undiagnosed anomalies, and detect infections or rare syndromes.[2]
- Clinical guidance: Findings often inform recurrence risks, helping guide management of subsequent pregnancies.[3]
- Institutional learning: Aggregated data from autopsies can help healthcare institutions identify systemic lapses, improve antenatal care protocols, and reduce preventable mortality.
- Parental closure: Knowing the cause of death can offer psychological comfort, reducing guilt and aiding the grieving process.[4]
- Recurrent pregnancy loss: In cases of RPL, **ex vivo fetal autopsy combined with whole exome sequencing (WES)** has demonstrated exceptional diagnostic power. A study among consanguineous couples achieved genetic diagnoses in 65 % of cases (45 % definitively pathogenic), and reached 100 % diagnostic success when fetal autopsy was available.[5] This underscores the pivotal role of fetal autopsy (with genetic analysis) in elucidating RPL etiology and informing future reproductive counseling.

The Role of Limited Autopsy: When full invasive autopsy is declined, a "limited autopsy" employing imaging—such as infantogram, ultrasound, MRI, CT, or micro-CT—offers a respectful and diagnostically robust alternative. This option respects parental preferences for minimal body disturbance while still yielding diagnostic

insight.[6] In a large cohort, micro-CT confirmed antenatal findings in 80 % of cases and obviated invasive autopsy in nearly 87 %.[7] Guidelines from CASaND recommend offering imaging-first approaches—such as limited autopsy, minimally invasive sampling, or external exams plus imaging—especially when full autopsy is refused.

The State of Uptake in India: Despite these clear benefits, perinatal autopsy is rarely offered or accepted in many Indian hospitals. Even in tertiary care settings, autopsies are often conducted only in medico-legal cases or when explicitly demanded by families. In rural and semi-urban areas, the practice is almost non-existent. Studies in states such as Tamil Nadu, Uttar Pradesh, and Punjab report autopsy rates in perinatal deaths below 10-14%, even where facilities exist.[8] Compared to countries where structured autopsy programs, education, and consent counselling are embedded in perinatal loss protocols—India lags behind due to a complex set of barriers. In the Stillbirth Collaborative Research Network study, placental pathology contributed to establishing the cause of death in 65 % of stillbirths, and fetal autopsy in 42 %—making them the most useful components of the stillbirth work-up.[9]

Barriers to Uptake: A Multidimensional Challenge: Barriers include limited availability of perinatal pathology expertise, especially outside tertiary centers; prohibitive out-of-pocket costs due to lack of insurance coverage; and deficiencies in high-quality, empathetic counseling. Parents often face time-pressured decisions without complete information, and many later express regret if autopsy was declined.[9]

1. Cultural and Religious Beliefs: Cultural sensitivities play a profound role in shaping attitudes toward postmortem procedures. In India's diverse religious landscape, both Hindu and Muslim families often prefer immediate burial or cremation, viewing any delay or invasive procedure as disrespectful to the dead. Many believe the body must remain intact for spiritual reasons, leading to outright refusal of autopsies. This belief is reinforced by lack of public awareness. Autopsies are frequently misunderstood as procedures only done in criminal cases, rather than tools of medical understanding. Without sustained community engagement, such deeply held taboos remain unchallenged.

2. Clinician Discomfort and Communication Gaps: Globally, one of the most consistent predictors of autopsy uptake is the clinician's ability to explain its value empathetically.[9] In India, however, doctors and nurses often lack training in grief communication and feel emotionally unprepared to approach bereaved families about autopsy. Conversations around death are difficult; adding the topic of bodily dissection often feels intrusive. In the absence of training or support structures, many healthcare workers default to silence, never broaching the topic at all.

3. Perceived Lack of Clinical Utility: In some settings, perinatal autopsy is viewed as an optional add-on rather than a valuable tool. Clinicians may feel confident in their presumed clinical diagnosis—especially when congenital anomalies or preterm complications are evident—and question the need for postmortem confirmation. This perception is more common in institutions with limited access to advanced pathology or genetic services, where autopsy results may not be actionable or timely. Yet, studies from developed contexts show that autopsy findings can challenge clinical assumptions in up to 40% of cases, revealing discrepancies that affect future care.[3] Recognizing this requires a paradigm shift among healthcare providers.

4. Institutional and Logistical Barriers: Even when clinicians are willing, institutions often lack the infrastructure to support autopsy services. Many hospitals do not have dedicated perinatal pathologists, and those that do are overburdened with forensic or medico-legal cases. The turnaround time for results is long, often rendering the findings irrelevant for families who have moved on. Additionally, documentation procedures are complex, consent protocols are unclear, and coordination between departments is minimal. Without institutional protocols and streamlined workflows, even the most motivated clinicians find the process frustrating.

5. Cost and Economic Burden: In the absence of public insurance coverage for autopsy services, the financial burden often falls on grieving families. For lower-income households, who have already incurred significant delivery or NICU expenses, this becomes a deterrent. While some public hospitals offer autopsies at

subsidized rates, awareness of such schemes is low, and costs related to transportation, documentation, and burial delays still apply.

Where It Works: Lessons from Good Uptake Settings: Though limited, there are examples within India and globally that demonstrate how the right blend of training, infrastructure, and sensitivity can shift norms:

- In North India, studies show that clinician confidence and communication significantly improve autopsy acceptance.[8]
- In Italy, the introduction of educational modules for obstetricians increased parental consent for fetal autopsy.[10]
- In France, grief counselling training for midwives led to better integration of autopsy conversations into the post-loss care pathway.[11]
- The UK's National Perinatal Mortality Review Tool (PMRT) mandates the discussion of autopsy in all stillbirth and neonatal death cases, supported by consent templates and follow-up protocols.[3]

These examples suggest that the key to uptake lies in systemic alignment: training clinicians, supporting them with institutional resources, and empowering families with respectful, well-informed choices.

Recommendations for India: A comprehensive strategy to improve perinatal autopsy uptake must address both supply- and demand-side barriers:

1. Training for Clinicians: Integrate bereavement counselling and autopsy communication into medical and nursing curricula. Short, skill-based modules can equip providers to initiate sensitive discussions compassionately. Structured communication—such as the SPIKES model adapted for perinatal bereavement—along with written decision aids, bereavement navigators, and collaboration with religious or cultural leaders can improve acceptance.

2. Standardized Institutional Protocols: Develop hospital-wide SOPs for counselling, consent, documentation, and result dissemination. Assign nodal officers to coordinate postmortem workflows across departments.

3. Public Awareness Campaigns: Use local media, community health workers, and antenatal education platforms to normalize autopsy and dispel religious taboos. Collaboration with religious leaders can help reframe the procedure as a moral duty to prevent future deaths.

4. Government Subsidies and Insurance Coverage: Include perinatal autopsy under Ayushman Bharat and state-level health schemes. Financial incentives for hospitals that conduct autopsies and submit reports can also improve compliance.

5. National Guidelines and Review Systems: Mandate autopsy discussion in perinatal death audits. Use data from autopsies to inform policy and improve maternal-neonatal health indicators.

Conclusion: Perinatal autopsy represents a silent opportunity—one that can speak volumes if listened to. In a country where stillbirths and neonatal deaths remain tragically common, the refusal to investigate "why" limits not just closure for families, but the evolution of the health system itself.

The barriers to uptake in India are real, but not immutable. Importantly, alternatives to full autopsy, such as minimally invasive approaches (postmortem MRI, CT, micro-CT, laparoscopically assisted tissue sampling) and partial autopsies, achieve 80–95 % concordance with traditional methods for certain anomalies. These options are particularly valuable for families declining full autopsy on cultural or emotional grounds.[9] With informed policy, cultural humility, clinical training, and institutional reform, perinatal autopsy can be repositioned from taboo to tool—from stigma to standard. In doing so, we may not be able to rewrite every tragic ending, but we can ensure that each one leaves behind the knowledge to prevent the next.

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Even if you never walked the earth, you will always walk through our memories

Rh Alloimmunisation in Pregnancy: Challenges and Advances in Prevention and Management

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Introduction: The Rh blood group system remains one of the most clinically significant in obstetrics, not only because of its role in hemolytic disease of the fetus and newborn (HDFN), but also due to the fact that the disease is largely preventable. Despite decades of medical advances and the availability of anti-D immunoglobulin, Rh isoimmunisation continues to contribute to avoidable perinatal morbidity and mortality, particularly in low-resource settings.

Rh antigens are transmembrane proteins expressed on the surface of red blood cells. To date, 49 antigens have been identified, of which the D antigen is the most immunogenic and clinically relevant. Rh negativity refers to the absence of the D antigen. The incidence of Rh negativity varies with ethnicity—approximately 15% in Caucasians, 8% in Africans, and less than 1% in Asians. In India, the prevalence is estimated at 5.87%. Inheritance of Rh antigens occurs through haplotypes involving two closely located genes, RHD and RHCE, on chromosome 1. An Rh-negative

individual can develop antibodies against Rh antigens when exposed to Rh-positive red blood cells, a process called alloimmunisation.

Pathogenesis of Alloimmunisation: Alloimmunisation typically occurs when an RhD-negative mother carries an RhD-positive fetus. Small amounts of fetal blood (sometimes as little as 0.1 mL) may cross into the maternal circulation during pregnancy or at delivery. Maternal exposure to RhD-positive red cells triggers the formation of IgG antibodies. These antibodies can cross the placenta in subsequent pregnancies, resulting in destruction of fetal red cells. Events that increase the risk of sensitisation include: Delivery and abortion (spontaneous or induced), Ectopic or molar pregnancy, Antepartum haemorrhage and blunt abdominal trauma, Invasive procedures such as chorionic villus sampling, amniocentesis, and cordocentesis, manual removal of placenta, and intrauterine fetal death. A rarely cited mechanism, the "grandmother theory," suggests that sensitisation can occur in utero when fetal blood is exposed to maternal cells that originated from the grandmother.

Detection and Screening: At the first antenatal visit, Rh-negative women undergo an antibody screen, typically using the indirect Coombs test (ICT). If negative, screening is repeated at 28 weeks and again at delivery.

- **ICT negative**: Prophylactic anti-D immunoglobulin is administered.
- **ICT positive**: The antibody titre is determined to assess the severity of alloimmunisation. Titres above the laboratory-defined critical threshold (commonly 1:8–1:16) predict significant risk for fetal anaemia. Beyond this threshold, repeat titrations are not useful; instead, surveillance shifts to Doppler velocimetry of the fetal **middle cerebral artery peak systolic velocity (MCA-PSV)**. The gel microcolumn assay is another method for antibody detection, though critical titres are less well defined. False positives may occur if the mother has recently received prophylactic anti-D.

Consequences of Rh Isoimmunisation: The spectrum of HDFN includes:

1. **Erythroblastosis fetalis** – due to compensatory fetal erythropoiesis.
2. **Hyperbilirubinemia** – leading to kernicterus in neonates if untreated.

3. **Hydrops fetalis** – characterised by ascites, pleural effusion, skin oedema, and high-output cardiac failure.
4. **Thrombocytopenia and neutropenia** – usually mild but associated with severe anaemia.

Without intervention, affected pregnancies may end in stillbirth or neonatal death.

Prevention of Rh Alloimmunisation: The introduction of **anti-D immunoglobulin** more than five decades ago revolutionised prevention. Prior to its use, nearly 16% of RhD-negative women became sensitised after two pregnancies with RhD-positive infants. With routine postpartum prophylaxis, this fell to 1–2%, and with combined antenatal and postnatal prophylaxis, the rate dropped further to 0.1–0.3%. However, global uptake remains suboptimal. It is estimated that in nearly 50% of eligible cases, anti-D prophylaxis is not administered due to cost, limited supply, or lack of awareness. Consequently, Rh isoimmunisation still accounts for approximately 160,000 perinatal deaths and 100,000 cases of disability each year worldwide. Current guidelines (ACOG, NICE, FIGO) recommend:

- Screening all RhD-negative women at booking.
- If antibody screen is negative, administration of 300 µg anti-D at 28 weeks.
- A second dose within 72 hours of delivery if the newborn is RhD positive.
- Administration of anti-D following sensitising events such as miscarriage, ectopic pregnancy, antepartum haemorrhage, and invasive procedures.

Management of Alloimmunised Pregnancy: The cornerstone of management is early detection and timely intervention.

A. First Affected Pregnancy

- Paternal Rh status is determined. If the father is Rh-negative, no further action is needed.
- If the father is Rh-positive, zygosity testing is performed. In cases of heterozygosity, the fetal RhD status can be determined noninvasively via cell-free fetal DNA testing from maternal plasma, detectable as early as 10 weeks.
- For RhD-positive fetuses, maternal ICT titres are monitored. Once titres reach the critical threshold, surveillance is shifted to MCA-PSV Doppler.

B. Subsequent Pregnancies- If a previous fetus was affected, disease typically appears earlier and is more severe. Therefore, MCA-PSV monitoring is initiated 10 weeks prior to the gestational age at which the previous fetus was affected.

Role of MCA-PSV: Noninvasive Doppler assessment of the fetal MCA-PSV has replaced invasive methods such as amniotic fluid bilirubin studies. A PSV >1.5 multiples of the median (MoM) for gestational age predicts moderate to severe anaemia with high sensitivity. Monitoring is usually performed every 1–2 weeks between 18 and 35 weeks of gestation.

Intrauterine Transfusion (IUT): IUT is the definitive therapy for severe fetal anaemia. It is performed between 18–35 weeks via intravascular transfusion into the umbilical vein or intrahepatic vein, under continuous ultrasound guidance. Donor blood must be O negative, CMV-negative, irradiated, leucodepleted, and antigen-negative for maternal antibodies. The aim is to raise the fetal haematocrit to 45–50%. Survival rates are approximately 94% in non-hydropic fetuses and 70% in hydropic fetuses. Complications include preterm labour, cord trauma, and a small risk of fetal death.

Neonatal Management: After delivery, neonates may require phototherapy, exchange transfusion, or top-up transfusions. Ongoing maternal antibodies can suppress neonatal erythropoiesis, necessitating close follow-up. Neurodevelopmental impairment occurs in about 5% of cases treated with IUT, with cerebral palsy and auditory dysfunction being the main sequelae.

Global Perspective and Future Directions: While developed nations have largely controlled Rh disease, challenges persist in resource-limited settings. The high cost of anti-D, dependence on donor plasma, and limited availability are major barriers. Advances in monoclonal anti-D production using recombinant DNA technology offer hope for wider availability. Noninvasive prenatal testing using cell-free fetal DNA is increasingly being adopted in high-resource settings but is not yet widely recommended for routine use in India due to costs and technical constraints.

Conclusion: Rh alloimmunisation is a largely preventable cause of perinatal morbidity and mortality. Widespread access to prophylactic anti-D, strict adherence to guidelines, and availability of advanced fetal therapy are essential to eliminate this condition. The story of anti-D immunoglobulin represents one of the greatest successes of preventive medicine, but inequities in access must be addressed if its benefits are to reach all women globally.

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Stillbirth is not the end of a story, but the beginning of a lifelong journey of love, remembrance, and healing

Management of Rh -Ve Pregnancy

Antibody status at first prenatal visit (ICT)

ICT NEGATIVE

Request antibody screening at 4 weeks interval or at 28 weeks

Antibody Negative

Give 300 mcg of polyclonal anti D in the deltoid muscle

Test cord blood group and direct Coombs test

- Give anti- D Inj. 300 mcg
- Do not give anti-D

ICT POSITIVE

Has patient received anti D recently i.e < 1 year ?

Yes

Usually Ab titre ≤ 1 : 4

Repear titer in 2-4 weeks

- < 1:4
  - Continues to be < 1:4
    - Deliver at 36-37 wks
- > 1:4
  - Manage as isoimmunized pregnancy

No

Manage as isoimmunized pregnancy

Manage as isoimmunised pregnancy

- >1:4
  - > 1:4
    - Manage as isoimmunized pregnancy

ICT titer more than the critical titre i.e. Laboratory specific. Usually 1:8 or 1:16 titre

Previous obstetric history
Start fetal monitoring 10 weeks before the previous affection i.e. fetal hydrops, fetal death, fetal transfusion or delivery and severe hemolytic disease of the newborn.

Foetal monitoring by MCA PSV

MCA PSV > 1.5 MoM for that gestation

Monitor every 1-2 weeks

MCA PSV > 1.5 MoM

MCA PSV continues to be <1.5 MoM

Indicates moderate to severe fetal anemia and needs IUT

Intra-uterine transfusion(IUT)
Refer to an appropriate centre

Deliver at 34-36 weeks

Stillbirths in Hypertensive Disorders of Pregnancy

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Introduction: Hypertensive disorders of pregnancy (HDP) are among the leading causes of maternal and perinatal morbidity and mortality worldwide. There are an estimated 2.6 million stillbirths each year, with 98% occurring in low- and middle-income countries. HDP contribute to 16% of these still births. Even more important is the fact that chronic hypertension accounts for 11% of these still births and preeclampsia only for 5%. Additionally It has been estimated that the HDPs precede 10% of early neonatal deathe (8/1000 live births) and a significant proportion of late neonatal deaths (3/1000 live births). This would approximate to about 1.5–2 million neonatal deaths annually.

Mechanisms Leading to Stillbirth

Uteroplacental Insufficiency: HDP often cause abnormal placentation, leading to impaired uteroplacental blood flow. The remodeling of spiral arteries in early pregnancy is critical for ensuring sufficient blood supply to the growing fetus. In conditions such as preeclampsia, this process is incomplete, leading to placental ischemia and hypoxia. The resulting placental insufficiency is a key contributor to fetal growth restriction and stillbirth.

Fetal Growth Restriction (FGR): FGR and hypertension are closely linked. It is hypothesized that FGR fetuses are more likely in women destined to develop preeclampsia. Also the fetuses born to preeclamptic mothers have cardiac remodeling similar to growth-restricted fetuses

Placental Abruption: Hypertension increases the risk of placental abruption leading to acute fetal hypoxia, massive maternal hemorrhage, and fetal death if not managed urgently. Chronic placental abruption may also be associated again adversely affecting the fetus.

Hypoxia During Convulsions: If HDP are not managed properly and timely they may result in eclampsia which again contributes to still births due to maternal and fetal hypoxia

Epidemiology and Prevention: As chronic hypertension is more likely to lead to still births health care policies need to focus on blood pressure monitoring in young adults for timely detection and management of hypertension. Preconceptional counseling and care go a long way towards helping meet this goal. Adoption of lifestyle modifications including a healthy diet, regular exercise and adequate and regulated sleep pattern is an important measure for preventing hypertension. Chronic hypertension is more likely to be associated with superimposed preeeclampsia which further magnifies the risk of adverse outcome. Interestingly HDP are more likely to increase the risk of still births in singleton pregnancy as compared to multifetal pregnancy. Hypertension is postulated to protect the twin gestation. Only superimposed preeclampsia has been found to increase the risk of still births in multifetal pregnancy. Besides these preconceptional and lifestyle measures the regular measurement of blood pressure at every antenatal visit cannot be overemphasized. It is essential for identification of chronic hypertension in women presenting for the first time during early pregnancy only, and also timely diagnosis and management of preeclampsia. Prediction models for preeclampsia must be implemented wherever feasible, followed by low dose aspirin in high risk cases.

Fetal Surveillance and Optimization of Fetal Outcome: Regular and tailored monitoring of all hypertensive pregnancies is essential to ensure early detection of fetal growth restriction and hypoxia and to deliver the woman appropriately with a fine balance of preventing prematurity and at the same time avoiding fetal asphyxia. Different tools used for monitoring include

- Ultrasound for fetal growth and amniotic fluid volume
- Doppler studies of the umbilical artery
- Non-stress tests (NST) and biophysical profiles (BPP)

These assessments help in identifying fetuses at risk and in determining the timing of delivery.

Management Strategies: The basic management objectives for any pregnancy complicated by HDP are:

- Termination of pregnancy with the least possible trauma to mother and fetus,
- Birth of a healthy newborn that subsequently thrives, and
- Complete restoration of health to the mother

Close monitoring of the maternal and fetal condition is the basis of management. Antihypertensive therapy aims to prevent maternal complications while ensuring adequate placental perfusion. Commonly used drugs include: labetalol, nifedipine, and methyldopa. Magnesium sulfate is used for seizure prophylaxis in preeclampsia and treatment of eclampsia. It also plays a role in neuroprotection of preterm neonates delivered before 32 to 34 weeks. For pregnancies less than 34 weeks, corticosteroids must be given to accelerate fetal lung maturity in anticipation of preterm delivery.

Timing of Delivery: Balancing the risks of prematurity with the danger of intrauterine death is crucial. In severe preeclampsia or evidence of fetal compromise, early delivery may be warranted, sometimes irrespective of gestational age.

- In chronic hypertension without superimposed preeclampsia and a controlled blood pressure pregnancy may be continued till 38 weeks
- In preeclampsia without severe features: delivery is usually planned at 37 weeks.
- In preeclampsia with severe features: delivery may be planned at 34 weeks

Monitoring in Labor: Continuous fetal monitoring during labor is essential in HDP cases to detect signs of distress promptly. Cesarean delivery may be indicated in the presence of fetal compromise.

Conclusion: The changing lifestyle of young adults is leading to a rise in obesity, diabetes and hypertension worldwide with consequent pregnancy complications. Late marriages and delayed childbearing is further compounding the problem. Concerted health care measures to help adolescents and young adults adopt a healthy lifestyle is important to improve pregnancy outcomes. Stillbirths associated with hypertensive disorders of pregnancy are largely preventable with timely identification, appropriate management, and regular antenatal care. Addressing modifiable risk factors, providing preventive therapies like aspirin and calcium, and ensuring safe delivery practices can dramatically reduce fetal mortality. Despite strides in pregnancy management India still has a long way to go to bridge gaps in care and address the disparities in access to quality antenatal care. Some still births are inevitable despite optimal care but we need to ensure that these are minimized.

Grief is the last act of love we can give to those we loved. Where there is deep grief, there was great love

Breaking Bad News in Perinatology: a Review of Strategies

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Introduction: Births are supposed to be celebrations of life. The experience of losing a baby starts with the diagnosis, but has many other emotional unfolding events continue long. Mothers who experience stillbirth have been found to be at greater risk of complicated grief and are more likely to suffer from long-term psychological distress. The timing of the diagnosis and the way in which the news are delivered are crucial for the emotional recovery of those parents. Bad news is defined as any information which adversely and seriously affects an individual's view of his or her future.[1] While the most common perception of bad news is a terminal illness, but in obstetric practice fetal anomaly incompatible with life,, intrauterine fetal death are also equally debilitating. A physician must equip himself/herself with the skills to deliver this news in a way that there is neither deficit of information provided nor empathy offered.

Annually around 2.6 million stillbirths occur worldwide and majority (98%) of them occur in low- and middleincome countries (LMICs). India ranks in top ten countries with the highest stillbirth numbers, with stillbirth rate of 23.3/1000 births in 2015.[2] Pregnancy a priceless time of joy sometimes, becomes equally distressing for those who end up in stillbirth. This loss of an unborn child leads to guilt, anger, mistrust

and selfblame. The grief leads to major mental illnesses such as post-traumatic stress disorder.[3] Declaring death is the physician's responsibility and a daunting task. With limited training, individual abilities, and other constraints it often results in vandalism, violence, maladjustment, and unrest to which there is hardly any preparedness.[4] There is a definite correlation between length of medical service and the ability to effectively communicate bad news, still many experienced clinicians and senior paramedical staff feel the need of communication training for better management. Paradoxically, junior doctors with little experience declare more deaths than their seniors.[5]

Implications of Breaking Bad News: Breaking bad news(BBN) is an art where the clinician has to strike a fine balance between truth and tragedy and handle the emotional outcomes on the patient as well as relatives. There are ethical and medicolegal implications of BBN. The technique employed in BBN can influence to what extent they understand the information, to what extent they are satisfied with the care, and over and above all, to what extent they can adjust psychologically to the bad news.[6]

Barriers to Breaking Bad News: BBN can take a heavy emotional toll on the clinician, he often feels burdened by negative news and anticipates negative reactions. The common barriers to breaking bad news are:

- The doctor is not sure about of patient's expectation
- The doctor fears that he may be destroying the hope of the patient.
- The doctor may fear that he himself may not be adequately capable of handling.
- The doctor may fear that he is incapable of managing the emotional reactions.
- The doctor might have presented an overoptimistic picture of the patient's condition and now getting embarrassed

Who Should Break Bad News? The head of the unit or a senior consultant who is known to the patient and family members should deliver the bad news. A senior member of the nursing staff may need to be called to break the bad news in certain emergencies where the treating consultants may be absent.

There are several tried and tested strategies that are commonly adopted to deliver bad news. Popular protocols include the SPIKES, ABCDE protocol, Kaye's 10-step model, and BREAKS protocol. All these protocols have traditionally been devised by oncologists. Hence, in subsequent years, other specialists, including surgeons and emergency physicians, have come up with their own modified protocols. The SUNBURN protocol has been developed to suit the purpose of trauma and acute care surgeons. Otherwise, any of SPIKES, ABCDE, Kaye's model, or BREAKS protocol may be used.

Table 1: BREAKS protocol [10]	
Background	An in-depth study on the patient's disease status, emotional status, coping skills, educational level, and support system is done before attempting to break the bad news
Rapport	Building rapport is essential. Physician should have unconditional positive regard. Present conditions should be probed through open-ended questions.
Explore	It is always preferable for the physician to start with what the patient knows about his/her illness
Announce	A warning shot is desirable
Kindling	Allow adequate space for the free flow of emotions Ensure that the patient/ relatives did not misunderstand the gravity of the disease
Summarize	Physician has to summarize the session and discuss the treatment plan

Fig. 1: SUNBURN protocol

Table 2: SPIKES [7] Protocol- Oldest & Most Commonly Used Worldwide

Setting up the interview	• Arrange for some privacy • Involve significant others as per the patient's choice • Sit down • Make connection with the patient: maintain eye contact and/or touch the patient (if he/she is comfortable with you doing so) • Manage time constraints and interruptions
Assess the patient's perception	• Determine what the patient knows about the medical condition or what he (she) suspects • Listen to the patient's level of comprehension • Determine if the patient is engaging in illness denial
Obtain the patient's invitation	• Ask the patient if he (she) wishes to know the details of the medical condition and/or treatment • Accept the patient's right not to know • Offer to answer questions later if he (she) wishes
Give knowledge and information	• Warn the patient that bad news is coming: this may lessen the shock that can follow the disclosure of bad news • Start at the patient's level of comprehension and vocabulary • Use nontechnical words • Avoid excessive bluntness • Give information in small chunks, and periodically check the patient's understanding • Avoid using phrases such as "There is nothing more we can do for you"
Address the patient's emotions with empathic responses	• Observe for any emotion on the part of the patient • Identify the emotion experienced by the patient by naming it to oneself • Identify the reason for the emotion • Let the patient know you have connected the emotion with the reason for the emotion by making a connecting statement If the patient is ready, discuss the treatment plan • Sharing responsibility for decision making • Check patient's understanding/misunderstanding of the discussion
Strategy and Summary	• Summarize the information you have provided.

Table 3: ABCDE Protocol [8]

Advance preparation	• Ask what the patient already knows and understands. • What is his or her coping style? • Arrange for the presence of a support person and the appropriate family • Arrange a time and place that will be undisturbed (hand off beeper) • Prepare emotionally • Decide which words and phrases to use (write down a script) • Practice delivering the news
Build a therapeutic environment/ relationship	• Arrange a private, quiet place without interruptions • Provide adequate seating for all • Sit close enough to touch if appropriate • Reassure about pain, suffering, abandonment
Communicate well	• Be direct ("I am sorry, have bad news") • Do not use euphemisms, jargon, or acronyms Say "cancer" or "death" • Allow for silence • Use touch appropriately • Ask the patient to repeat his or her understanding of the news • Arrange additional meetings • Use repetition and written explanations or reminders
Deal with patient and family reactions	• Assess patient reaction: physiologic responses: (a) flight/fight, conservation/withdrawal, (b) cognitive coping strategies: denial, blame, intellectualization, disbelief, acceptance, (c) affective responses: anger/rage, fear/terror, anxiety, helplessness,vhopelessness, shame, relief, guilt, sadness, anticipatory grief • Listen actively, explore feelings, express empathy
Encourage and validate emotions (reflect back emotions)	• Correct distortions • Offer to tell others on behalf of the patient • Evaluate the effects of the news • Explore what the news means to the patient • Address further needs, determine the patient's immediate and near term • Plans, assess suicidal thoughts. Make appropriate referrals for more support • Provide written materials • Arrange follow-up • Process your own feelings

Setubal et al [11] reported that a lecture on SPIKES protocol followed by simulation activities and immediate feedback, in the intervention group, —were able to increase obstetrics gynecology residents' performance in breaking bad news. Their study was the first one offering a specific training program in BBN utilizing active learning methodologies as simulation with feedback and SPIKES model for perinatology residents at our medical school. Its strengths rest on the fact of the residents' volunteer participation ,which show the residents' interest and need for training in BBN.

The SPIKES protocol which had been designed for oncology has been used in several medical specialties, for training medical professionals on how to break bad news to patients [12].The strategies proposed by this protocol seem to be suitable for ob-gyn, resulting in the improvement of the professionals' performance and a greater personal satisfaction while communicating bad news to patients. However, ob-gyn has several particularities, and may benefit from specific protocols. In obstetrics and ultrasound, for example, the diagnosis and communication occur almost simultaneously, and there is no time to prepare the environment or for doctors to prepare themselves, which would be the first stage of the SPIKES protocol. Another particular aspect of the ob-gyn specialty is that the patient is often a couple, requiring different approaches for each of the individuals involved. The existing models offer considerable methods to address the issues of BBN. However, they fall short in providing effective methods to overcome the issues while addressing the semiurban, rural and low educated mass. There are different social and cultural variations in different communities, Various methods to address the specific challenges are enumerated:

1. Identify the literacy level of the patient and provide tailored information to their level of understanding. Prepare the information to be provided in the vernacular language of the patient and use graphics to explain what cannot be put across in words.
2. Discuss about patient autonomy and who is her guardian. If the patient chooses not to know about her diagnosis, ensure that guardian is informed. This helps to maintain the trust with physician.

3. Try to understand family dynamics before BBN to sensitive subjects. Assure the patient about absolute confidentiality before discussing emotional and psychosocial stresses.
4. Introducing lectures on breaking bad news, video clips, role- playing, and small group discussions as part of clinical training must be encouraged [13].

While these recommendations are not absolute, they are a starting point. Future research must specifically be directed towards amalgamation of different strategies as per need of respective work area to meet the needs these women.

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IHCP: Current Insights & Future Directions

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Introduction: IHCP is a reversible hepatic condition exclusive to pregnancy, characterized by pruritus and elevated serum bile acids. Though maternal outcomes are usually favorable, the condition is associated with increased risks of spontaneous preterm birth, meconium-stained amniotic fluid, and intrauterine fetal demise.[1] Indian data from tertiary centers estimate a prevalence between 1% and 4%.[2]

Pathophysiology and Etiological Factors: The pathogenesis of IHCP involves a complex interplay of hormonal, genetic, and environmental influences:

- Hormonal Dysregulation: Elevated levels of estrogen and progesterone impair bile acid transport and gallbladder motility.[3]
- Genetic Mutations: Variants in hepatobiliary transporter genes such as ABCB4, ABCB11, and ATP8B1 disrupt bile acid excretion, leading to hepatic accumulation and cholestasis.[4]
- Environmental Contributors: Factors such as reduced sunlight exposure and alterations in gut microbiota may exacerbate bile acid retention and hepatic dysfunction.[5]

Diagnostic Criteria: Diagnosis is primarily clinical, supported by biochemical confirmation:

- Symptomatology: Pruritus, especially on the palms and soles, without accompanying rash.[6]

- Biochemical Markers: Non-fasting serum bile acid levels >10 µmol/L are suggestive; levels ≥19 µmol/L are considered diagnostic.[7] Liver transaminases (ALT, AST) and bilirubin may be elevated but are not predictive of fetal risk.[8]

IHCP is a diagnosis of exclusion; other hepatic and dermatologic conditions must be ruled out. Autotaxin assays may help differentiate IHCP from dermatologic pruritus.[9] Resolution of symptoms and normalization of liver function within three months postpartum retrospectively confirm the diagnosis.

Fetal Surveillance and Risk Stratification: IHCP is associated with increased incidence of gestational diabetes, hypertensive disorders, neonatal respiratory distress, and NICU admissions.[10] The risk of stillbirth rises significantly when maternal bile acid levels exceed 100 µmol/L, particularly beyond 35 weeks gestation.[11] Conventional Monitoring tools such as cardiotocography and biophysical profiles often fail to detect impending fetal compromise. Surrogate indices like neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and systemic immune-inflammation index (SII) are under investigation for their prognostic value.[11] The myocardial performance index (TEI index) on fetal echocardiography has shown potential correlation with elevated bile acids and adverse outcomes, though further validation is needed.[13]

Recommended Monitoring and Delivery Timing: Weekly bile acid assessments from 32 weeks onward are advised. Delivery timing should be individualized based on peak bile acid levels.[7]

10–39 µmol/L: deliver between 39+0 and 39+6 weeks
40–69 µmol/L: deliver between 38+0 and 38+6 weeks
70–99 µmol/L: deliver between 36+0 and 37+6 weeks
≥100 µmol/L: consider delivery by 36 weeks or earlier in high-risk cases

Pharmacologic Management and Investigational Therapies: Ursodeoxycholic Acid (UDCA): Administered at 10–15 mg/kg/day in divided doses, UDCA remains the first-line treatment. It alleviates pruritus and may reduce risks of preterm birth and

meconium-stained fluid, particularly in patients with bile acid levels ≥40 µmol/L.[14] However, its efficacy in preventing stillbirth remains inconclusive.[15]

Adjunctive Agents: Rifampicin is being explored for refractory pruritus and persistent bile acid elevation.[16] Other agents such as S-adenosylmethionine (SAMe), cholestyramine, and corticosteroids lack robust evidence and are not routinely recommended.

Novel Therapeutics: Investigational compounds include volixibat (IBAT inhibitor), FXR agonists, norUDCA, and 4-phenylbutyrate—each targeting distinct pathways in bile acid metabolism and hepatocellular function.[17]

Artificial Intelligence and Precision Medicine: AI-based models trained on clinical and laboratory data have demonstrated high predictive accuracy (AUC >0.9) for diagnosing IHCP and estimating bile acid levels.[18] These tools may be particularly valuable in resource-limited settings where timely biochemical testing is unavailable. Integration of AI into clinical workflows could enable earlier diagnosis, improved risk stratification, and personalized management.

Conclusion: IHCP remains a clinically significant condition with evolving diagnostic and therapeutic paradigms. Future research should focus on validating emerging biomarkers, refining fetal surveillance strategies, and developing targeted therapies. The integration of AI and precision medicine holds promise for enhancing maternal and fetal outcomes, particularly in low-resource settings.

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"You never opened your eyes, yet you filled mine with tears and my heart with love"

Fetal Outcome in the Critically Ill Pregnant Patient

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Introduction

Pregnancy complicated by severe maternal illness remains a significant challenge in obstetric care. Approximately 0.1–0.9% of pregnancies require critical care support. The rising maternal age at conception, pre-existing co-morbidities, and the increasing incidence of obstetric complications have contributed to this trend. In critically ill pregnant women, fetal outcomes are directly linked to the maternal physiology. Hypoxia, hypotension, and systemic inflammation may result in fetal growth restriction [FGR], preterm birth, or fetal demise.

"In maternal critical illness, saving the mother is the first step towards saving the child."

The management challenge lies in balancing maternal resuscitation with fetal well-being, a scenario that brings together complex ethical, clinical, and prognostic considerations. Obstetricians require a sound understanding of fetal physiology during maternal crises, while Intensive care unit [ICU] teams must be aware of fetal viability, monitoring techniques, and optimal delivery timing.

Prevalence and Burden

Global and Regional Trends: Worldwide, 0.1–0.9% of pregnancies require ICU admission. Common indications include:

- Severe preeclampsia/eclampsia

- Sepsis
- Massive obstetric hemorrhage
- Maternal cardiac conditions

In **resource-limited settings**, higher ICU admission rates are often due to delayed referrals.

Maternal Mortality

The World Health Organisation [WHO], 2023, reports nearly 287,000 maternal deaths annually, 70% from preventable causes: obstetric hemorrhage, hypertensive disorders, and infections. ICU availability alone does not ensure survival; timely triage and multidisciplinary care are critical.

Geographic Inequities

Approximately 86% of maternal deaths occur in Sub-Saharan Africa and South Asia, where access to ICU facilities, ventilators, blood products, and essential drugs is limited. In contrast, high-income countries have better maternal outcomes but rising ICU use due to older, more medically complex gravidas.

Implications for the Fetus

Fetal outcomes in critical maternal illness are tied closely to maternal systemic compromise. Late ICU transfer often means late fetal salvage.

A critically ill pregnant or postpartum woman is defined as one with a potentially life-threatening disorder requiring ICU admission, organ support, or advanced life-sustaining interventions

[Williams Obstetrics, 25th ed.; Mhyre JM et al., Crit Care Med, 2005]

Maternal–Fetal Pathophysiology

Uteroplacental Circulation Vulnerability: During pregnancy, uteroplacental blood flow rises from ~50 mL/min to 500–700 mL/min at term. This circulation is non-autoregulated, making it entirely dependent on maternal cardiac output and vascular tone. In critical illness, hypotension or vasoconstriction—as seen in sepsis,

shock, or eclampsia—rapidly reduces perfusion, leading to severe fetal compromise. With no collateral circulation, fetal hypoxia develops quickly.

Impact of Critical Illness

- Septic shock, Acute respiratory distress syndrome [ARDS], hemorrhage, or vasopressor use → decreased placental perfusion, increased risk of infarction, abruption, FGR, and fetal death.
- Pro-inflammatory cytokines [TNF-α, IL-1β, IL-6] disrupt placental function and may trigger fetal inflammatory response syndrome[Fig. 1].
- Anti-inflammatory cytokine suppression [IL-10, TGF-β] worsens inflammatory injury.
- Maternal stress hormones [cortisol, catecholamines] can impair fetal brain development and growth, although they may accelerate lung maturity.
- Placental hormone dysregulation [hCG, PlGF, progesterone] impairs angiogenesis and perfusion.
- Endothelial injury and coagulopathy contribute to FGR, abruption, and stillbirth.

Gestational Age and Outcomes

Trimester	Key Risks in Critical Illness
First [0–13^{+6} weeks]	Miscarriage, congenital anomalies, early loss due to limited perfusion
Second [14–27^{+6} weeks]	FGR, preterm labor, fetal death [if severe hypoxia or coagulopathy]
Third [28+ weeks]	Preterm birth, stillbirth, neurological injury—timely delivery is key

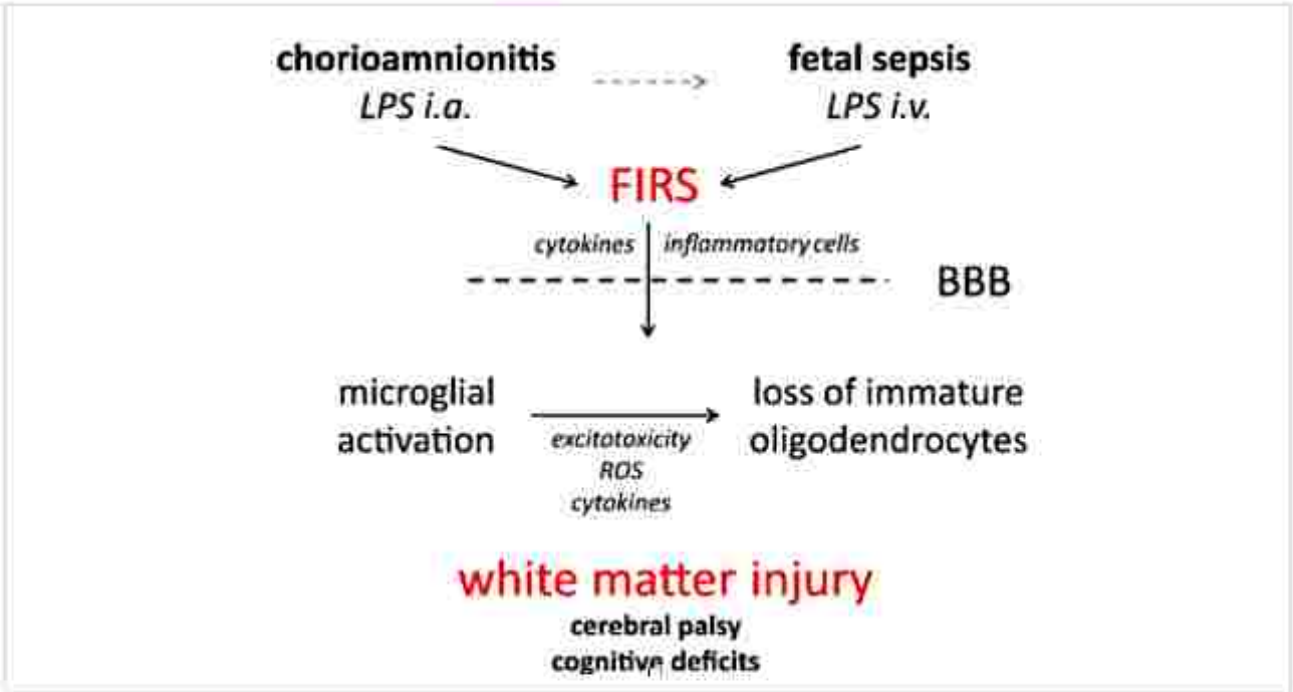

Fig. 1: Triggering of fetal inflammatory response syndrome [FIRS]

Short- and Long-Term Fetal Outcomes

- **Short-term:** Prolonged neonatal ICU [NICU] stay [2–4 weeks], ventilation support, intraventricular haemorrhage [IVH], necrotising enterocolitis [NEC], patent ductus arterioles [PDA] in preterm infants.
- **Long-term:** Neuro-developmental delay, cerebral palsy, learning disabilities [especially <28 weeks gestation or low Apgar]. Early physiotherapy and developmental support are vital.

Stillbirth Risk in Critical Illness

Stillbirth is defined as a fetus born with no signs of life. [≥20 weeks or ≥500 g;ACOG, WHO]. Critically ill pregnant women face a 3–7 times higher stillbirth risk, with rates up to 25% in septic shock, multi-organ failure, eclampsia/HELLP, or ARDS. [Table 1]

Clinical Red Flags in ICU

- Hemoglobin <7 g/dL → fetal hypoxia risk
- Platelets <50,000 → delivery bleeding risk
- Prolonged PT/aPTT, high D-dimers → possible DIC
- Positive antiphospholipid antibodies

Table 1: Comparing the Risk of Stillbirth in Different Critical Maternal Illnesses

Condition	Risk of stillbirth
Severe pre-eclampsia/ HELLP	+++
Septic shock	+++
ARDS/ Mechanical ventilation	++
Diabetic ketoacidosis [DKA]	+++
Major trauma/ haemorrhage	+++

Management Principles

- Correct maternal parameters [hemoglobin, platelets, coagulation] first
- Multidisciplinary involvement: hematology, obstetrics, neonatology, physician
- Continuous fetal surveillance [Cardiotocography, Doppler studies, Biophysical profile]
- Avoid teratogens; use safer alternatives [e.g., levetiracetam, lamotrigine]
- Prompt seizure control
- Imaging [Magnetic Resonance Imaging or MRI preferred] for suspected stroke

ICU and Delivery Considerations

Avoid teratogenic immunosuppressants; treat infections aggressively; monitor fetal growth closely. The delivery timing depends on maternal stability, gestation, and fetal well-being. Vaginal delivery is preferred unless obstetric indications require cesarean section.

"Protecting the mother is the cornerstone of protecting the fetus."

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Chromosomal Microarray in Prenatal Diagnosis: Seeing the Genome in Finer Detail

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Introduction: In just a few decades, prenatal diagnosis has moved from looking at whole chromosomes under a microscope to reading them in microscopic detail. One of the biggest leaps forward in this journey is Chromosomal Microarray Analysis (CMA), a technology that gives doctors and parents a much more detailed look at the baby's genetic blueprint even before birth.

What is CMA? Think of the human genome as a massive set of encyclopaedias, with 23 pairs of "books" called chromosomes. The older method, karyotyping, is like standing across the room and checking if the books are in order or if whole book is missing or duplicated. CMA is the equivalent of using a magnifying glass to look for tiny missing or duplicated paragraphs, known as copy number variants (CNVs). Karyotyping sees changes on the 5–10 million base pair (Mb) scale, while CMA can detect imbalances down to the 50,000–100,000 base pair (0.05–0.1 Mb) level.

CMA comes in two main forms:

- Comparative Genomic Hybridization (CGH) arrays – Compare a baby's DNA with a standard "reference" to find extra or missing segments.
- Single Nucleotide Polymorphism (SNP) arrays – Do all of the above and also detect certain special genetic situations such as triploidy (extra set of chromosomes),

uniparental disomy (both copies of a chromosome from one parent), and even signs of related parents (consanguinity).

Advantages:

- Large research studies have shown that CMA finds important genetic changes that standard testing can miss: (a) In about 6% of babies with physical abnormalities seen on ultrasound (but normal karyotypes). (b) In about 1–2% of pregnancies where ultrasound is normal but testing is done for other reasons like advanced maternal age or positive screening tests.
- Detects far smaller changes than karyotyping
- CMA also can detect some copy number changes near the chromosomal breakpoint sites in rearrangements that appear to be balanced on a conventional karyotype.
- CMA does not need living cells because it works on uncultured samples. Hence useful for stillbirth evaluation.
- Results come faster.

Limitations:

- Cannot detect "balanced" chromosome swaps (translocations) that may still affect future pregnancies.
- Misses tiny gene-level mutations (e.g., cystic fibrosis).
- Sometimes finds changes of uncertain significance. These can create anxiety when the outcome is unclear.

Abnormalities Detected With Conventional Karyotype, CGH and SNP Arrays

Technique	Aneuploidy	Balanced translocations and inversions	Unbalanced translocations	Triploidy	AOH/ Consanguinity	CNVs
Conventional karyotype	+	+	+	+	-	-
CGH array	+	-	+	-	-	+
SNP array	+	-	+	+	+	+

AOH, absence of heterozygosity; CGH, comparative genomic hybridisation; CNV, copy-number variants; SNP, single-nucleotide polymorphism
Adapted from: SMFM. Use of chromosomal microarray for prenatal diagnosis. Am J Obstet Gynecol 2026

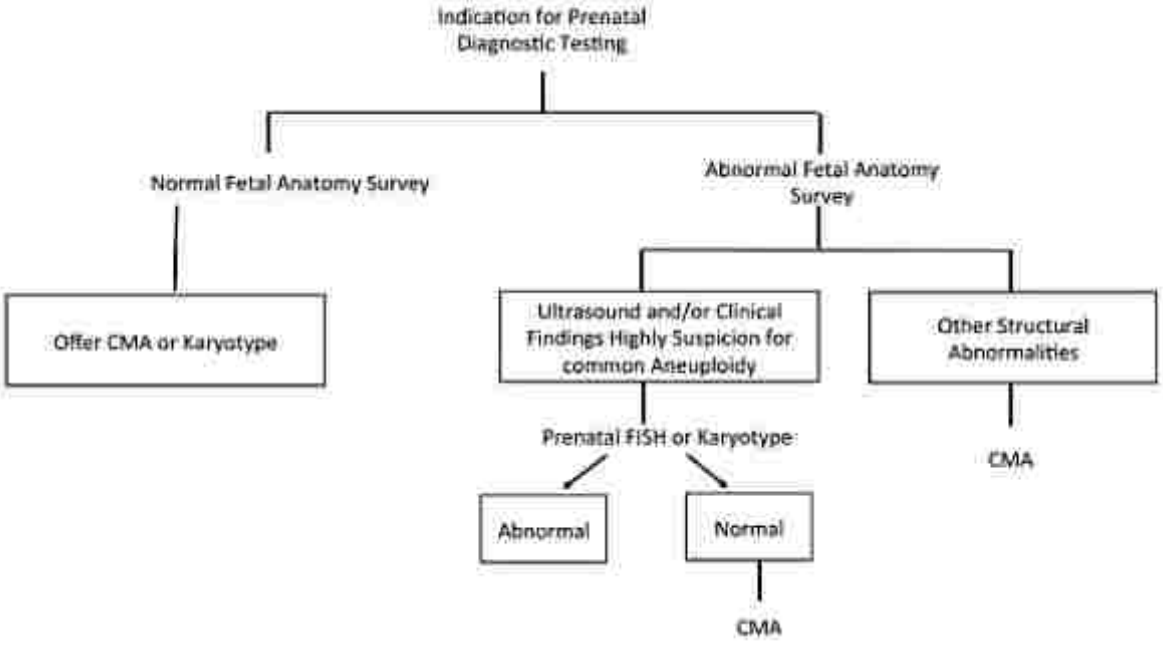
Variants of Uncertain Significance (VUS): About 1–2% of CMA results show a DNA change that we don't yet fully understand. These "VUS" findings are a double-edged sword. That is why pre and post-test genetic counselling is essential. Experts can explain what is known, guide next steps, and help families cope with uncertainty.

According to SMFM and ACOG, CMA Should Be Recommended:

- When foetal structural anomalies are present
- In cases of stillbirth (replacing karyotype).
- Considered for any pregnancy having diagnostic testing (amniocentesis or chorionic villus sampling), even if the ultrasound looks normal.

CMA is not recommended as a first-line test for early pregnancy loss (miscarriage) due to limited benefit.

Algorithm for Use of CMA With Prenatal Diagnosis



The Future: Every year, our ability to interpret CMA results improves as research links more CNVs to known conditions. As this knowledge grows, the uncertainty from many findings will lessen. Ultimately, the real value of CMA lies not just in technology, but also in pairing scientific precision with compassionate communication, so families can make informed, confident decisions.

Summary: CMA is a breakthrough that lets us see the foetal genome in unprecedented detail, helping to uncover hidden genetic changes and answer questions that older tests couldn't. While it brings both opportunities and challenges, its thoughtful use is shaping a more informed and prepared future for prenatal care.

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From Heartbeat to Silence: The Role of Antenatal Surveillance

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Every stillbirth is a tragedy- not only a life is lost but also considered a missed opportunity. Antenatal surveillance brings in a tools to monitor fetal wellbeing, detect compromise early and intervene before it gets very late. Yet, there are countless clinics and hospitals in India where early warning signs go unrecognized and are acted upon very late.

This article discusses the timing and tools of antenatal surveillance especially in high risk pregnancies and to focus the spotlight on the need to fill the gap between surveillance and timely decisive action.

The Power of Fetal Movement Monitoring: A mother's perception of fetal movement is one of the most accessible, non-invasive and cost-effective indicators of fetal health. Kick charts are used by expecting mothers to monitor fetal well-being. A sudden decrease in fetal movements may precede stillbirth by hours or days. Studies have shown that constant monitoring of fetal movement can markedly reduce the rate of stillbirth rates. Yet, mothers are not satisfactorily educated and encouraged to track fetal movements and at times they are being dismissed or reassured without adequate evaluation when they report concerns.

Doppler Studies and Non-Stress Test [NST]: Tools Beyond the Basics: In high risk pregnancies, advanced surveillance becomes crucial. NST should be initiated in high-

risk cases from 28-32 weeks onwards depending on the indication. Regular NSTs weekly or biweekly are advised in many cases. Umbilical artery Doppler helps assess placental resistance. Middle cerebral artery and ductus venosus Dopplers indicate fetal compensation and cardiac decompensation. Early detection of abnormal Doppler flow can identify fetuses at risk of hypoxia before cardiotocographic [CTG] changes occur. Despite clear guidelines, these tools are often underutilized, particularly in resource-constraint settings.

Surveillance in High-Risk Pregnancies: These pregnancies deserve intensified vigilance. Many stillbirths in these groups are preventable with strict adherence to protocols.

- **Diabetic pregnancies:** Risk of late stillbirth increases after 36 weeks; biophysical profiling and Dopplers help guide timing of delivery.
- **FGR:** Surveillance must include serial growth scans, Doppler assessment, and NSTs. Abnormalities in umbilical artery PI or reversed flow are critical red flags.
- **Hypertensive disorders:** Placental insufficiency is common. Combining BP control with fetal surveillance is vital.
- **Previous stillbirth**: Surveillance should begin early, with a personalized care plan and psychological support.

Bridging the Gap: From Surveillance to Action

Surveillance only saves lives if it leads to timely, appropriate action. The barriers include: delayed referral or transfer in abnormal findings, lack of training in CTG/ Doppler interpretation, fear of preterm delivery- even when fetal compromise is evident, and over-reassurance from a single "normal" test. What is needed is a culture of preparedness—protocol-based responses, rapid escalation pathways, and multidisciplinary decision-making.

Case Reflections: Lessons From Missed Opportunities

Case 1: A 34-week FGR case with decreased fetal movements for 2 days. No NST was done; mother was reassured. Presented in labor with absent fetal heart sounds.

Case 2: A 30-year-old diabetic lady, on medical nutrition therapy. NST showed non-reactive trace, but delivery was delayed. Baby was delivered stillborn 48 hours later.

Both these lives could have been saved with proactive interpretation and intervention.

Conclusion: a Call to Action: We must ensure that every obstetrician, midwife, and primary care provider is empowered with knowledge, tools, and protocols for antenatal surveillance. Just as importantly, mothers must be educated and respected as the first line of fetal monitoring.

From heartbeats to silence is often a journey of a few hours or days but with vigilant surveillance and timely care, it need not be a journey at all.

'Let us break the silence with science, compassion, and action.'

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Rainbow Clinic

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"After every storm, there comes a rainbow — a reminder that even in our darkest moments, light and hope can return."

A rainbow has always symbolized something bright and beautiful after a storm — hope, resilience, and new beginnings. When it comes to pregnancy, this symbolism becomes deeply moving. For parents who have endured the devastating silence of loss — whether miscarriage, stillbirth, or infant death — a subsequent pregnancy is not just another milestone. It is an emotional journey where joy mingles with fear, and anticipation is colored with memories of grief.

Such babies born after a loss are lovingly called *rainbow babies*. They embody the belief that light can indeed shine after the darkest storm.

"Every time I look into my daughter's eyes, I'm reminded and humbled by the beauty of life, of hope. For she painted away my dark clouds with the colours of the rainbow"

Why Rainbow Clinics?

Nearly half of women who experience stillbirth struggle with anxiety in subsequent pregnancies, while 20–30% face post-traumatic stress. Their risk of complications, including preterm birth and recurrence of stillbirth, is significantly higher. These

parents require not just medical monitoring, but sensitive and holistic support. This is the heart and soul of the *Rainbow Clinic*.

The Birth of Rainbow Clinics

The first Rainbow Clinic was established in 2013 at St. Mary's Hospital, Manchester, under the leadership of Professor Alexander Heazell. Its mission was clear: to walk alongside parents with previous adverse pregnancy outcomes, offering both advanced medical care and unwavering emotional support.

Although the UK had seen a decline in stillbirth rates through the *Saving Mothers' and Babies' Lives Care Bundles,* rates remained higher than many other high-income countries. Recognizing this gap, the Rainbow Clinic model expanded across the UK in 2022 and has since grown to nearly 25 units. The vision has also crossed borders, with similar clinics now operating at Mount Sinai Hospital, New York, among others.

What Every Pregnancy After Loss [PAL] Deserves?

At its core, the Rainbow Clinic is a sanctuary where hope is nurtured. Its aims are simple yet profound: (a)**Compassionate care:** Listening without judgment, offering continuity and empathy at every step. (b)**Specialist monitoring:** Identifying high-risk factors, conducting appropriate investigations, and ensuring timely interventions. (c)**Holistic support:** Combining obstetric expertise with bereavement counseling, mental health services, and emotional care. (d)**Equity of access:** Ensuring the highest standard of maternal and fetal medicine is available to all, regardless of financial background.

The goal is not only to improve clinical outcomes, but also to restore confidence, reduce anxiety, and give families the gift of a positive birth experience after tragedy.

Building a Rainbow Clinic

Creating such a clinic requires more than infrastructure — it requires heart. A multidisciplinary team stands at its center: Maternal–fetal medicine specialists, Compassionate midwives and nurses, Sonographers, Bereavement counselors, Mental health professionals, Neonatologists and pediatricians. Together, they design individualized care plans, increase frequency of antenatal checkups, and extend

appointment time for deeper conversations. Beyond medicine, they foster reassurance, trust, and healing. The effectiveness of Rainbow Clinics is measured not only in reduced pregnancy complications, but also in the smiles of relieved mothers, the gratitude of families, and the easing of silent burdens carried for too long.

The Road Ahead

Despite their immense value, Rainbow Clinics face challenges — financial constraints, unequal access across regions, and the need for training healthcare providers in bereavement care. Yet, these hurdles are worth overcoming. Each Rainbow Clinic represents a promise: that no parent should face pregnancy after loss without guidance, compassion, and hope.

🌈 A rainbow cannot exist without both sunshine and rain. In the same way, Rainbow Clinics stand as a testament to resilience — helping parents honor the memory of the child they lost, while embracing the promise of the child they await.

A rainbow baby is a special kind of miracle that only exists because of your loss, not DESPITE YOUR LOSS

From Infection to Loss: Malaria's Hidden Toll on Pregnancy

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Stillbirth is one of the most devastating outcomes of pregnancy, and malaria remains a major, yet preventable, contributor in endemic regions. Pregnant women are particularly vulnerable due to altered immunity and placental sequestration of parasites. The consequences are severe: maternal anemia, intrauterine growth restriction (IUGR), preterm delivery, and ultimately stillbirth. Understanding how malaria causes stillbirth—and how it can be prevented—is central to improving maternal and neonatal survival, both for women living in endemic regions and for those who travel there.

Data Spotlight: Malaria and Stillbirths

- WHO estimates that **10–20% of stillbirths** in high transmission areas are attributable to malaria.
- In **sub-Saharan Africa**, malaria in pregnancy contributes to nearly **200,000 stillbirths annually**.
- In **India and Southeast Asia**, although transmission intensity is lower, *P. vivax* infections are increasingly recognized as a cause of stillbirth.

- For **travelers**, even short-term exposure in endemic regions can lead to infection and pregnancy loss if preventive measures are not taken.

Pathophysiology: Why Stillbirths Occur

Malaria in pregnancy is most often caused by *Plasmodium falciparum*, though *P. vivax* also contributes in South Asia. Infected red blood cells accumulate in the placenta, leading to inflammation and reduced nutrient and oxygen transfer to the fetus. This disruption can result in:

- **Placental Malaria:** Reduced placental blood flow and hypoxia, directly associated with stillbirth.
- **Maternal Anemia:** Severe anemia limits fetal oxygenation and increases risk of intrauterine death.
- **Fetal Growth Restriction & Preterm Labor:** Compromised growth and premature birth raise the likelihood of stillbirth.
- **Severe Maternal Illness:** Cerebral malaria or multi-organ failure may be fatal for both mother and child.

Diagnosis: Detecting the Silent Threat

Malaria in pregnancy often presents without fever or typical symptoms, while placental damage silently progresses. Regular **screening in antenatal care** is therefore critical. **Rapid diagnostic tests (RDTs)** and **microscopy** remain essential tools. For women in endemic regions and for travelers, early suspicion and prompt testing are vital to prevent stillbirth.

Prevention: Breaking the Link with Stillbirth

Preventing malaria is the most effective way to reduce stillbirths.

- **Intermittent Preventive Treatment (IPTp):** In high-transmission regions, WHO recommends sulfadoxine-pyrimethamine (SP) from the second trimester, given regularly at antenatal visits. IPTp has been shown to reduce maternal anemia, low birth weight, and stillbirths.
- **Insecticide-Treated Nets (ITNs):** Universal use during pregnancy is a proven method to prevent mosquito bites and subsequent malaria infection.

- **Travel Precautions:** Pregnant women are advised to avoid travel to malaria-endemic areas. If unavoidable, chemoprophylaxis appropriate for the region, ITN use, and prompt medical care are essential.

Treatment: Protecting Both Mother and Fetus

Early and effective treatment is crucial to prevent stillbirths once infection occurs.

- WHO Recommendations:
  - *Uncomplicated malaria*: Artemether-lumefantrine (AL) is safe and effective even in the first trimester; ACTs such as artesunate-amodiaquine or dihydroartemisinin-piperaquine are used later.
  - *Severe malaria*: Intravenous artesunate is first-line in all trimesters.
- India (MoHFW):
  - *P. vivax*: Chloroquine in all trimesters; primaquine contraindicated.
  - *P. falciparum*: AL or artesunate + SP in later trimesters, with quinine or AL considered in the first. Severe cases require parenteral artesunate, quinine, or artemether.

Challenges in Preventing Malaria-Related Stillbirths

- Resistance to sulfadoxine-pyrimethamine threatens IPTp effectiveness in some areas.
- Rural populations often face limited access to antenatal services, diagnostics, and drugs.
- Cultural and socioeconomic barriers may reduce ITN use and delay treatment.
- Travelers may underestimate risks and fail to use preventive measures.

Key Messages for Clinicians

- Malaria is a leading preventable cause of stillbirth in endemic areas.
- Placental malaria may be silent; routine screening is vital.
- Preventive measures (ITPs, ITNs, chemoprophylaxis for travelers) save lives.
- Artemether-lumefantrine is preferred for uncomplicated malaria; IV artesunate for severe malaria.
- National guidelines, including those from MoHFW India, must guide context-specific treatment.

Conclusion

Stillbirths due to malaria are a preventable tragedy. Whether for women living in endemic areas or for those who travel, prevention through ITNs, IPTp, and chemoprophylaxis remains critical. Early diagnosis and appropriate treatment can break the link between malaria and fetal death. Addressing barriers to care and strengthening antenatal services are essential steps toward ensuring that every pregnancy has the chance to end in a live birth.

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Mindfetalness and Management of Reduced Fetal Movements

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Perceived fetal movements are defined as the maternal sensation of discrete kicks, rolls, or swishes. Such movements reflect the integrity of the neurological and musculoskeletal systems. A normal fetus is capable of physical movements and goes through both rest and sleep phases.

Maternal reports of decreased fetal movement (DFM) are a common reason for presentation to maternity care and are associated with stillbirth and other adverse outcomes. Promoting awareness of fetal movements and ensuring prompt assessment of DFM have been recommended to reduce stillbirths. However, evidence to guide the clinical management of such presentations remains limited. Educational approaches to increasing awareness of fetal movements among pregnant women and maternity care providers, with the aim of reducing stillbirths, have recently been evaluated in several large international clinical trials.

Women usually perceive fetal movements by 18 to 20 weeks of gestation. Multiparous women may perceive them as early as 16 weeks, while primigravidae may perceive them later than 20 weeks.

Numerous factors affect the perception of fetal movements, including fetal compromise as seen in intrauterine growth restriction (IUGR), placental insufficiency,

and congenital malformations, as well as maternal factors such as obesity, advanced maternal age, anterior placenta, and the use of certain drugs.
Various methods to count fetal movements are available, including the Cardiff Count, Daily Fetal Movement Count, and the Sadovsky method. Educating mothers regarding fetal movement counting and recognizing danger signs is important to prevent fetal demise and enable early detection of fetal compromise.

There is an unmet need for reliable fetal movement monitoring methods, given their crucial role in assessing fetal well-being and reducing adverse pregnancy outcomes, particularly stillbirth. While current guidelines primarily rely on subjective maternal perception, emerging wearable technologies offer promising alternatives. Various monitoring systems, leveraging different sensor types and machine learning algorithms, are in development, with accelerometers being the most prevalent and showing potential for objective, continuous, and reliable fetal movement monitoring.

Preventing Intrapartum Stillbirths

Innovations, Obstacles, and Strategies in Maternal and Fetal Care

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Introduction: Intrapartum stillbirth—when a baby dies during labor or delivery—remains a tragic reality in many parts of the world, even as overall stillbirth rates have declined over recent decades. Preventing intrapartum stillbirths is not only a medical imperative but a deeply humanitarian one, calling for sustained efforts across clinical practice, health systems management, and community engagement. This document examines the causes, risk factors, and evidence-based strategies for preventing intrapartum stillbirths, highlighting both global perspectives and local innovations.

Knowing About Intrapartum Stillbirth: Intrapartum stillbirth refers to the death of a fetus during labor and delivery, typically after 28 weeks of gestation (depending on national definitions). In contrast, antepartum stillbirth occurs before labor begins.
Magnitude of the Problem: Globally, millions of families are affected by stillbirth each year. Approximately half of all stillbirths occur during labor—the so-called "intrapartum stillbirths"—and the highest rates are observed in low- and middle-income countries (LMICs). In high-resource settings, intrapartum stillbirths are now rare, largely due to improvements in obstetric care.

Causes and Risk Factors: Intrapartum stillbirths generally result from acute events that compromise oxygen delivery to the fetus. Common causes include:

- Prolonged or obstructed labor
- Placental abruption (premature separation of the placenta from the uterus)
- Cord prolapse or compression
- Uterine rupture
- Maternal complications (e.g., eclampsia, severe infection, hemorrhage)
- Fetal infection or congenital abnormality (less common intrapartum)

Risk Factors:

- Lack of skilled birth attendance
- Ineffective or delayed monitoring of fetal and maternal well-being
- Delay in accessing emergency obstetric care
- Poor maternal nutrition and health
- Multiple gestations or abnormal fetal position
- Previous stillbirth or poor obstetric history

Prevention Strategies: Preventing intrapartum stillbirths requires a multi-tiered approach embracing preconception, antenatal, intrapartum, and postpartum interventions.

1. Antenatal Care: Effective antenatal care is foundational for identifying and managing risk factors before labor begins.

- Screening for High-Risk Pregnancies: Identification of women at increased risk (e.g., preeclampsia, gestational diabetes, multiple gestation) allows for closer monitoring and timely referral.
- Managing Maternal Health: Control of chronic conditions, nutritional supplementation, and treatment of infections reduces complications during labor.
- Education and Birth Preparation: Educating pregnant individuals and families about danger signs, birth preparedness, and the importance of skilled birth attendance can facilitate early action during emergencies.

2. Skilled Birth Attendance: The presence of skilled birth attendants—midwives, obstetricians, and trained nurses—is the single most critical factor in preventing intrapartum stillbirths.

- Continuous Intrapartum Monitoring: Assessment of labor progression, fetal heart rate monitoring (by intermittent auscultation or electronic methods), and timely recognition of complications are vital.
- Use of Partograph: The partograph is a simple, graphical tool for tracking labor's progress. It helps detect prolonged or obstructed labor early, prompting timely intervention.
- Timely Decision-Making: Prompt decisions regarding interventions such as augmentation of labor, instrumental delivery, or cesarean section can be life-saving.

3. Access to Emergency Obstetric Care: When complications arise, rapid access to comprehensive emergency obstetric care is essential. Core capabilities should include:

- Cesarean section and operative vaginal delivery
- Blood transfusion and management of hemorrhage
- Neonatal resuscitation and care for birth asphyxia
- Management of hypertensive disorders and sepsis

Health systems must ensure that facilities are available, accessible, and adequately resourced, and that referral systems function efficiently.

4. Fetal Surveillance Technologies: Improvements in fetal monitoring technology have contributed to the reduction of intrapartum stillbirths in high-income settings. These include:

- Electronic Fetal Monitoring (EFM): Continuous or intermittent EFM can detect signs of fetal distress, guiding timely intervention.
- Doppler Ultrasound: Useful for assessing fetal well-being, especially in high-risk pregnancies.
- Low-Cost Innovations: In resource-limited settings, hand-held Dopplers and mobile health applications are being developed to support birth attendants.

5. Institutional Policies and Protocols: Clear, evidence-based protocols help standardize care and reduce preventable errors.

- Emergency Drills: Regular simulation training for obstetric emergencies (e.g., shoulder dystocia, cord prolapse) prepares teams for rapid, coordinated responses.
- Checklists: Simple checklists can improve adherence to best practices, especially during shift changes and emergencies.

6. Addressing Health Inequities and Social Determinants: Many intrapartum stillbirths are rooted in broader social and economic inequities, including poverty, gender inequality, geographical barriers, and lack of education. Prevention efforts must:

- Strengthen community education and engagement
- Empower individuals and families to seek timely care
- Promote women's health and rights before, during, and after pregnancy
- Address transport and financial barriers to accessing skilled care

Challenges to Prevention: Despite advances, several barriers hinder the prevention of intrapartum stillbirths, particularly in low-resource settings:

- Inadequate Health Infrastructure: Shortage of trained personnel, poor facility conditions, and unreliable supply chains.
- Delays in Seeking Care: Social, cultural, or financial factors may delay care-seeking by pregnant individuals or families.
- Late Recognition of Complications: Failure to identify or act on fetal distress or prolonged labor in time.
- Data Gaps and Underreporting: Reliable data collection is often lacking, making it difficult to track progress and target interventions.

Innovations and Future Directions: There is hope in the form of ongoing innovations and global partnerships:

- Task-Shifting and Training: Equipping community health workers and midwives with more skills and mobile technologies enhances coverage and quality of care.

- Mobile Health (mHealth) Solutions: Use of mobile phones for reminders, education, and even remote monitoring is expanding rapidly in LMICs.
- Telemedicine: Connecting remote facilities with specialists can improve decision-making and emergency response.
- Better Data Systems: Digitized records and real-time reporting support surveillance, accountability, and quality improvement.
- Global Collaboration: Initiatives by the World Health Organization, UNICEF, and other agencies are promoting standardized guidelines, research, and resource mobilization.

Conclusion: Preventing intrapartum stillbirths requires a holistic, systems-based approach that integrates sound clinical practice, strong health infrastructure, community empowerment, and innovation. Success depends on collaboration between healthcare providers, policymakers, communities, and families—each playing a crucial role in safeguarding maternal and newborn health. As knowledge advances and resources improve, the vision of making every birth a safe birth comes closer to reality.

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Are We Also Mothers?- A Medical Narrative

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"The reality is that you will grieve forever. You will not 'get over' the loss of a loved one; you will learn to live with it."

Elisabeth Kübler-Ross

Firsts are always special.

The first time you hold a scalpel, the first suture you tie, the first surgery you perform independently — and, of course, the first pregnancy.

I was exhilarated, and so was my family. She was also going to be the first — the first daughter, the first grandchild. I had already named her: Maryam.

"How do you know it's a girl?" my husband asked.

"I just know," I replied. It was as if she whispered to me from within. I had never felt so certain, or so happy.

One afternoon during duty hours, my professor asked casually, "Did you get your double marker and NT scan done?" The NT scan, performed between 11–13 weeks, screens for early chromosomal and structural abnormalities. The double marker is a blood test that estimates the risk of aneuploidy.

I admitted, half-apologetically, "No, ma'am. I've been so busy I forgot. Anyway, I'm low risk. Can't I just skip it?"

Her expression hardened. "Absolutely not. Get it done immediately."

She placed the probe and paused.

"Something is not as it should be."

My heart froze. Something wrong? With my baby? But how could that be? She felt okay. She was okay. I knew it.

But the second opinion, and then a third, confirmed the same: something was gravely wrong.

We were sent for counselling. The words blurred together: "anomalous venous system... type I... the most severe form... eventual cardiac overload and failure."

My baby's heart would fail.

"You are young," they told us gently. "You'll have another child."

Another? But what about her?

She was already mine. She was already a part of me.

What followed were endless hours of research. I read every journal article on UVSS. Type 1 carried the bleakest prognosis. My husband, his voice faltering, whispered, "We don't want our baby to suffer."

I agreed, but guilt consumed me when I took mifepristone — the drug that begins a medical abortion. Forty-eight hours later, misoprostol followed. With every contraction, I felt her slipping away. And just like that, she was gone.

I felt hollow, as though something essential had been carved away.

Her fragile body was immersed in a jar of saline for genetic testing, then returned to me the next day in the same vessel. My husband planned to bury her in the morning. That night was all I had. I held her as close to my heart as I could. She had perfect little hands and feet. She already was beautiful, in her own unfinished way.

A year passed. The anguish, once unbearable, softened but never left.

When I conceived again, I did not name my baby. I didn't feel the same joy. Anxiety replaced it — constant dread, doubt, fear. My husband tried to keep hope alive: "I love both of you" I received a message at work.

For the first time, I allowed myself to respond: "We love you too."

But at 10 weeks, the ultrasound was silent. No heartbeat.

I was numb. How could I tell him? Again. But I did, and I watched his heart break, again. He held me and whispered, "You're my whole world. You're all I need."

Now, as I train in fetal medicine, my days are considered "productive" when anomalies are diagnosed. Yet each time I see one, my heart shatters again. I don't just see a diagnosis — I see a mother yearning for a healthy child.

Recently, I met a 22-year-old in my ward who had to terminate her pregnancy because her baby had trisomy 21. I doubt she fully understood the condition. She was simply a mother cradling her baby's lifeless body at 20 weeks, weeping. And I wept with her.

Empathy, I have come to realise, is what transforms us. And for that, I am grateful. Textbooks may teach us to identify anomalies and manage complications, but only lived experience teaches to feel the weight of someone else's grief. It allows us to see the patient not as a clinical case but as a person — fragile, fearful, hopeful. It makes us gentler in our words. Empathy does not erase suffering, but it makes us better doctors, because it reminds us that every loss carries a story.

And I ask myself: are we still mothers?

Those of us whose babies never live to see this world?

I believe we are.

Because for the weeks and months they were within us, we were their whole world, like mothers are to their children.

And oh, what I would give to tell my babies — ***you were mine too, and you always will be.***

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Book of Abstracts

001: The Dark Side of Shared Circulation Intrauterine Demise In Twin-Twin Transfusion Syndrome: a Case Report.

Nishtha Chaubey, GRMC Gwalior

Twin-Twin Transfusion Syndrome (TTTS) is a rare but life-threatening condition affecting monochorionic diamniotic twin pregnancies due to abnormal vascular anastomoses in the shared placenta, leading to unbalanced blood flow between the twins. We report a case of a 30-year-old 3rd gravida previous 2 FTVD at approximately 22 weeks gestation who presented with lower abdominal pain. On clinical examination, she was hemodynamically stable with moderate pallor and a distended abdomen with multiple fetal parts. Ultrasound revealed a monochorionic diamniotic twin pregnancy with polyhydramnios in one sac and oligohydramnios in the other, consistent with Quintero Stage I TTTS. Fetal cardiac activity was doubtful. The patient progressed to spontaneous preterm labor and delivered two stillborn fetuses weighing 300 grams and 400 grams, respectively. The placenta was single, confirming shared circulation. This case highlights a late and unfortunate presentation of TTTS resulting in intrauterine fetal demise (IUFD) of both twins. It emphasizes the importance of routine early anomaly scans, timely identification of polyhydramnios- oligohydramnios sequence, and prompt referral to a fetal medicine unit for possible fetoscopic laser therapy. Early diagnosis and intervention in TTTS can improve perinatal outcomes significantly. This report aligns with the conference theme of "Reducing Risk" by stressing the need for early risk recognition and evidence-based management in high-risk twin pregnancies.

002: Stillbirth- Reducing Risk for Happy Minds

Rajni Kharkwal, KGMU, Lucknow

Stillbirth remains a devastating outcome of pregnancy with profound psychological, emotional and social consequences for families. Globally, an estimated 2 millions stillbirths occur annually. Key modifiable risk factors of stillbirth include maternal comorbidities (such as hypertension and diabetes), fetal growth restriction, placental insufficiency, advanced maternal age, lifestyle factors and inadequate care. Enhanced antenatal surveillance including routine ultrasound for fetal growth assessment, fetal movement monitoring, targeted investigation in high-risk pregnancies plays a crucial role in early detection and intervention. Additionally, addressing social determinants of health such as, access to quality care, patient education and cultural barriers remain essential in reducing disparities in outcomes. Through a multidisciplinary, prevention-oriented approach, stillbirth risks can be minimized while promoting psychological well-being. Reducing still birth is not only a medical imperative but a crucial step toward safeguarding mental health and human dignity.

003: Association Between CTG With Umbilical Cord Blood pH and It's Neonatal Outcome In Term Pregnancy

Deepika, Neetu Singh, Mona Misra. Dr RMLIMS, Lucknow

Background: Cardiotocography (CTG) is a widely used intrapartum tool for assessing fetal well being by monitoring fetal heart rate patterns in relation to uterine contractions.However,CTG interpretation is subject to high inter-observer variability and false-positive rates leading to potentially unnecessary interventions.umbilical cord arterial blood gas analysis, particularly pH measurement,offers a more objective evaluation of fetal acid-base status at birth and may improve perinatal outcome prediction. **Aim**: To assess the association between CTG patterns and umbilical cord arterial blood pH and to evaluate their combined predictive value for neonatal outcomes in term pregnancies. **Methods**: A prospective observational study was conducted over 18 months at Dr RMLIMS.A total of 160 term pregnant women in labor were enrolled.CTG was classified using FIGO guidelines into Normal, suspicious, pathological categories following delivery,cumbilical cord arterial blood was analyzed for pH. **Results**: A significant association was observed between pathological CTG findings and low umbilical cord arterial pH(<7.2),indicating metabolic acidosis.Neonates born with abnormal CTG patterns and low pH had higher rates of NICU admissions and low APGAR scores. **Conclusion**: while CTG remains a valuable intrapartum monitoring tool,its predictive accuracy improves when combined with objective parameters like umbilical cord blood pH.

004: Hypertensive Disorder In Pregnancy and Still Birth

Nishtha Chaubey. GRMC Gwalior

Background: Intrauterine fetal demise (IUD) remains a significant contributor to perinatal mortality, especially in developing countries. Among various etiologies, pregnancy-induced hypertension (PIH) is a major maternal factor associated with IUD. Placental and umbilical cord pathology often underlie these fetal losses. **Aim**: This study aimed to evaluate the gross and microscopic pathological changes in the placenta and umbilical cord in cases of IUD associated with PIH and correlate findings with maternal parameters. **Methods**: An observational study was conducted at Kamla Raja Hospital, G.R.M.C., Gwalior, over 20 months. Sixty-five cases of IUD (>20 weeks gestation) were analyzed. Placentae were examined grossly and histologically for infarctions, calcifications, retroplacental hematoma, abnormal cord insertions, and villous pathology. **Results**: Common findings included maternal vascular underperfusion, infarctions, retroplacental hemorrhage, and velamentous cord insertion. A significant correlation was observed between histopathological abnormalities and maternal hypertension. **Conclusion**: Placental and umbilical cord pathology plays a pivotal role in IUDs associated with PIH. Early detection and intervention in hypertensive pregnancies may reduce perinatal loss. Histopathological examination should be routine in IUD cases for diagnostic and preventive insights.

005:Improving High-Risk Pregnancy Care and Stillbirth Measurement Through Phone-Based Follow-Up In Uttar Pradesh

Richa Yadav, Nikhil Srivastav**, Lovey Pant** Payal Hathi#, Ujjawala Dixit**. *ASMC, Bahraich, **Research And Action for Health in India (RAAHI);# University of California, Berkeley*

Background: Accurate data on stillbirth is critical for improving maternal and perinatal health but remains limited in India, where estimates vary widely across sources. In 2019, the UN estimated India's stillbirth rate as 13.9 per 1,000 total births, while India's Sample Registration System (SRS) reports rates as low as 3.0 per 1,000. Moreover, administrative systems often lack timely, comprehensive follow-up on high-risk pregnancies (HRPs), particularly in Uttar Pradesh, which has some of the country's highest stillbirth rates. **Aim**: In response, we piloted a system at Autonomous State Medical College Bahraich, in partnership with Research And Action for Health in India (RAAHI), to improve both care and outcome measurement for HRPs. **Methods**: Between February 2024 and February 2025, we enrolled 8,451 pregnant women attending outpatient antenatal care (ANC), and identified 11% as HRP based on clinical criteria. As part of routine care, a nurse stationed in the outpatient department encouraged HRP women to continue follow-up care and facilitated referrals. **Results**: While HRP women had more follow-up visits than non-HRP women, overall follow-up remained suboptimal: only 22% of HRP women completed four or more ANC visits, the WHO standard for all pregnancies. To further address this gap, we piloted phone-based reminders encouraging HRP women to return for care. We also conducted follow-up calls after due dates to document pregnancy outcomes. Among 496 attempted contacts, outcomes were ascertained for 119 women (122 pregnancies), revealing a stillbirth rate of 25.6 per 1,000 total births. Though incomplete and preliminary, this rate is substantially higher than official estimates. **Conclusion**: These early findings underscore the need for innovative low-cost strategies to improve follow-up among high-risk women and stillbirth measurement. Post-ANC tracking through phone-based systems shows promise for enhancing maternal health surveillance and informing interventions in low-resource settings like Uttar Pradesh. Further evaluation is underway.

006: Intrapartum Stillbirth, Associated Stillbirth, Associated Risk Factors and Delays In a Tertiary Care Hospital.

Sunita Attri. AIIMS, Jammu

Background: Intrapartum stillbirth accounts for approximately 1.2 million deaths globally each year, representing a substantial yet preventable burden on maternal and perinatal health. A thorough understanding of the associated risk factors is essential to guide targeted interventions and improve outcomes. **Aim**: This study aimed to identify clinical and obstetric risk factors contributing to intrapartum stillbirths in a tertiary care setting. **Methods**: A prospective observational study was carried out in the Department of Obstetrics and Gynaecology at S.M.G.S. Hospital, Jammu, over a 12-month period from September 2020 to August 2021. Ethical clearance was obtained from the hospital's review board. The study population included women presenting with confirmed intrauterine fetal demise (IUD) or those experiencing stillbirth during

hospitalization, with a gestational age greater than 22 weeks and birth weight exceeding 500 grams. **Results**: Of the 22,723 deliveries conducted during the study period, 800 resulted in stillbirths, corresponding to a stillbirth rate of 35.2 per 1,000 births. The mean maternal age was 26.57 ± 4.65 years. Primigravidas accounted for the largest proportion of stillbirths (43.13%). Prematurity emerged as the most frequent intrapartum risk factor (8.98%), followed by placental abruption (6.86%) and acute fetal distress (6.11%). **Conclusion**: Preterm birth, particularly when accompanied by small-for-gestational-age status, was strongly associated with intrapartum stillbirth. Delayed arrival at the hospital was identified as the most significant systemic contributor to these outcomes. These findings highlight the urgent need to strengthen perinatal care systems, including early identification of high-risk pregnancies, timely referral, and improved access to skilled intrapartum care

007: A Retrospective Study of Obstetric Causes and Sociodemographic Factors Associated With Intrauterine Fetal Death In a Tertiary Care Centre

Priyanka Kundal, AIIMS Jammu

Background: Intrauterine fetal death (IUFD) is a traumatic event for the mother and her family, and also distressing for the treating obstetrician. Understanding the obstetric and sociodemographic factors contributing to IUFD is essential for developing targeted interventions, improving perinatal care, and reducing such outcomes. **Aim**:This study aimed to identify these factors and find out the potentially preventable causes. **Methods**: A retrospective observational study was conducted in the Department of Obstetrics and Gynaecology at Lalla Ded Hospital, Srinagar, Kashmir—a tertiary care center—over one year (March 2021 to February 2022). Included were singleton IUFD cases at >28 weeks gestation, confirmed by ultrasound or clinical absence of fetal heart sounds. **Results**: The stillbirth rate was 19.6 per 1,000 births. Most cases (67.1%) were among women aged 21–30 years, with 58.9% being unbooked. A large proportion (74.7%) belonged to the lower middle class. IUFD occurred most commonly between 28–32 weeks (39%) and 33–37 weeks (33.6%). Maternal hypertensive disorders were the leading cause (33.6%), including pre-eclampsia (27.4%) and eclampsia (6.2%). Other causes included placental abruption (11.7%), gestational diabetes (6.2%), severe anemia (3.4%), congenital anomalies (2.7%), and fetal infections (2%). **Conclusion**: Reducing stillbirth rates requires routine antenatal care, early identification of high-risk pregnancies, and better access to emergency obstetric services. Promoting institutional deliveries and training community birth attendants are crucial. Additionally, counseling, evaluation for future pregnancies, and bereavement support should be integral parts of perinatal care.

008: Incidence and Determinants of Stillbirth at Tertiary Health Facility- a Retrospective Study

Tania Verma, AIIMS Jammu

Background: Stillbirth, defined as fetal death at or beyond 28 weeks of gestation, remains a serious obstetric challenge with profound emotional impacts. Despite improvements in maternal healthcare, stillbirth rates remain high in low- and middle-income countries, including India. **Aim**:

This study aimed to determine the prevalence, causes, and associated factors of stillbirths over a one-year period in a tertiary care hospital. **Methods**: A retrospective observational study was conducted at a tertiary care teaching hospital from July 2021to June 2023. Data were collected from hospital records, including delivery registers and patient files. **Results**: Out of 6,587 total deliveries, 109 were stillbirths, yielding a stillbirth rate of 16.5 per 1,000 births.Maternal: Most affected were aged 20–24 years (37.6%), multigravida (67%), and emergency admissions (66%). Many lacked adequate antenatal care. Fetal : 80.7% were preterm (<37 weeks), 44.9% weighed 1000–1499g, and 59.6% were male. Mode of Delivery: 85.3% were vaginal deliveries, while 14.7% required surgical intervention. Identifiable Causes: Found in 80.8% of cases. Leading causes included: Hypertensive disorders (24.8%), Maternal anemia (22%),Abruption and IUGR (8.2% each. Other causes: oligohydramnios, placenta previa, congenital anomalies, infection, diabetes, hypothyroidism, DIC. **Conclusion**: Most stillbirths occurred in unregistered or poorly monitored pregnancies. Hypertension and anemia were leading causes. Improving antenatal care, timely identification of high-risk pregnancies, and promoting institutional deliveries could significantly reduce stillbirth rates. Additionally, emotional support and counseling should be provided to affected families.

009: Circulating Estrogen Levels at Delivery in Preeclamptic Pregnancies: a Clinical Evaluation

Rhiya Singh, Pavika Lal. GSVM, Kanpur

Aim:To assess serum estradiol levels at delivery in women with preeclampsia, compare them to normotensive pregnant controls, and investigate possible correlations with disease severity. **Methods**:This was a cross-sectional observational study carried out in the Department of Obstetrics & Gynaecology, among 100 term pregnant women. Fifty were preeclamptic and fifty were normotensive controls. Blood was drawn intrapartum, and serum estradiol was analyzed by high-sensitivity chemiluminescent immunoassay. Maternal blood pressure, proteinuria, and gestational age were noted for comparative and correlative purposes. **Results**:The serum estradiol mean levels were lower in the preeclamptic group than in normotensive controls ($p < 0.001$). A reverse correlation was found between levels of estradiol and signs of disease severity, such as heightened mean arterial pressure and proteinuria. These data suggest a possible hormonal deficiency involved in the endothelial dysfunction of preeclampsia. The evidence supports previous literature indicating that modified estrogen biosynthesis or metabolism can compromise placental perfusion and vascular adaptation, exacerbate the disease process. Decreased estrogen status at the time of delivery can also be used as a diagnostic or predictive marker. Limitations are sample size and one-point measurement of hormones. **Conclusion**: Estrogen deficiency has been found to be strongly linked with preeclampsia at birth. Estradiol has the potential to act both as a biomarker as well as a therapeutic agent in the management of preeclampsia. Its role in prediction and intervention must be made clear with larger prospective studies.

010: Critical Assessment of Stillbirth at Tertiary Care Hospital

Asmita. Dr. RMLIMS, Lucknow

Background: Stillbirth is a global health issue affecting over 7000 families daily, with emotional, social, and economic consequences. Stillbirth rate was 18.4 per 1000 births worldwide. India has the highest number of stillbirths, with 592-100 deaths per year. The Indian Newborn Action Plan aims to reduce stillbirths to <10 per 1000 births by 2030. However, knowledge about distal risk factors, such as socioeconomic, lifestyle, and co-morbidities, is limited. **Aim**: To analyze the causes, preventability, and patterns of stillbirths, evaluate maternal, fetal, and institutional factors contributing to it, and propose actionable interventions. **Methods**: A retrospective study was conducted on all stillbirths over 28 weeks at a hospital Dr. RMLIMS, Gomtinagar, Lucknow using delivery registers, case files, and perinatal audit forms as data sources. **Results**: Out of 7024 deliveries, stillbirth rate was 78.30/1000 total births. Cause of intrapartum stillbirth showed statistically significant correlation with patient's place of residence (rural>urban), distance of health centre from her house, time taken to reach first point of contact and her parity. The major obstetrical causes of stillbirth identified were APH 22.36%, hypertensive disorders of pregnancy 19.27%, IUGR 15.27%, unexplained causes 11.09%, malpresentations 9.64%, rupture uterus 9.09% and obstructed labour 6.36%. Severe anemia was found in 24.91% as an associated obstetrical cause of stillbirth. **Conclusion**: Stillbirth rates in India are higher than in developed countries, with antepartum obstetric complications being the most common. Intrapartum causes of stillbirth, such as obstructed labor and rupture uterus, account for 15.45% of cases, indicating the need for improved healthcare services to reduce stillbirth rates in developing countries.

011: Silent Losses - Silent Data': Reviewing Stillbirth Data Quality in LMICs Using Data Quality Dimensions

Anuj Kumar Pandey, Diksha Gautam. PhD Scholar - Mahidol University Thailand

Precise data is crucial for policy decision-making, especially in sensitive areas like stillbirth, where each data element might have significant effects. Following years of advancement in the healthcare domain, there is a pressing need to improve data-based policymaking by addressing both the social context and emotional dimensions. This holds true for any healthcare condition including stillbirth, which demands the attention of healthcare managers, researchers and policymakers. Conditions such as stillbirth signify more than a birth devoid of vital signs. A mother endures months of discomfort and excruciating labor pain, only to confront the reality of her baby's death. The lack of her child's initial cry disrupts her life, causing her to struggle with confusion and sadness on the factors that may have led to this catastrophe. In spite of this significant loss, we typically perceive it as merely one death, often neglecting to acknowledge it adequately. Significant advancements in averting stillbirths can be achieved by viewing it as a loss of life, rather than only perceiving it as the birth of a lifeless infant. Examining stillbirth data and comprehending its causes can aid in formulating strategies to avert future incidents. This publication seeks to compile information on the principal issues associated with the reporting and

recording of stillbirths in low- and middle-income countries (LMICs) from the perspective of data quality aspects. Furthermore, it also proposes strategies to enhance each aspect of data quality like harmonizing stillbirth definitions, linking routine data systems with surveys, and facility audits for better data capture, increasing funding for stillbirth-related research etc.

012: Group B Streptococcus as a Cause of Stillbirth

Supriya Adigoppula, Tamkin khan, Fatima khan, Tabassum Nawab, Nishat Afroz. JNMC, AMU, Aligarh

Background: Group B Streptococcus (GBS) is a significant but underrecognized cause of stillbirth, particularly in low- and middle-income countries (LMICs) like India, where diagnostic and surveillance practices are limited. **Aim**: To estimate the prevalence of maternal GBS colonization and correlate it with fetal infection and placental histopathology. **Methods**:This cross-sectional study was conducted over 24 months at a tertiary care center. Maternal rectovaginal swabs and fetal samples (cord blood, lung aspirate) from 102 stillbirths (≥28 weeks or ≥1000 g) were cultured for GBS. Placental tissues were examined histologically. Associations were analyzed using chi-square and logistic regression. **Results**: Maternal GBS colonization was found in 17.6% of stillbirth cases. GBS was isolated from 11.8% of amniotic fluid, 7.8% of cord blood, and 4.9% of lung aspirates. A significant maternal–fetal concordance was observed, with GBS-positive mothers showing 5.3 times higher odds of fetal GBS detection ($p = 0.001$). Placental inflammation was significantly more common in GBS-positive cases ($p < 0.001$). **Conclusion**: GBS is a major, yet often overlooked contributor to stillbirths, with strong maternal–fetal transmission and placental involvement.The findings highlights the need for routine GBS screening during pregnancy, including the consideration of maternal GBS vaccination and national screening guidelines, to reduce preventable stillbirths in low-resource settings.

013:Impact on Maternal and Perinatal Outcomes After the Implementation of Physiological Interpretation of Cardiotocograph (CTG) In the United Arab Emirates (UAE)

Edwin Chandraharan, Ani Jose, Sailaja Vuppu, Ritu Nambiar, Bency Dev. Burjeel Medical City & Burjeel Hospital, Burjeel Holdings, Abu Dhabi

Background: Misinterpretation of the features observed in the cardiotocograph (CTG) may lead to unnecessary intrapartum operative interventions to women due to over-reaction ("pathological" CTG) I or may result in hypoxic-ischaemic encephalopathy (HIE) or perinatal deaths. Physiological interpretation of CTG involves classification of CTG traces based on the type of hypoxic/non-hypoxic stress and determining the fetal responses to stress to individualise care. **Aim**: To determine the impact of implementing the principles of physiological interpretation of CTG at two premier tertiary referral hospitals specialising in complex obstetric care in the UAE on the rate of intrapartum emergency caesarean sections (EMLSCS) and HIE. **Methods**: All staff working in the labour and delivery rooms (LDR) at the Burjeel Medical City (BMC) and Burjeel Hospital, Abu Dhabi (BHAD) underwent intense training on the principles of physiological interpretation of CTG in May

2024. This was followed by implementation of International Expert Consensus Guidelines on Physiological Interpretation of CTG produced by > 50 CTG experts from > 20 countries. This was followed by monthly update sessions and "refreshers" on physiological interpretation of CTG to re-enforce knowledge. The rates of EMLSCS and HIE were analysed. **Results**: The rates of EMLSCS reduced from 37% and 34% from BHAD and BMC, respectively, to 20% at both maternity units within 13 months. There were no cases of HIE due to CTG misinterpretation during the same period. **Conclusion**: There was a notable reduction (>40%) in the rate of emergency caesarean section at both tertiary referral hospitals providing complex obstetric care within 13 months of implementing the principles of physiological interpretation of CTG. This decrease was accompanied by an absence of HIE due to CTG misinterpretation at both quaternary referral hospitals for over 13 months.

014: Group B Streptococcal Colonisation - a Silent Threat to Feto-Maternal Wellbeing

Anandalekshmi K, Zehra Mohsin. JNMC, AMU, Aligarh

Background: Group B streptococcal infection(GBS) is caused by Streptococcus agalactiae. This Gram positive bacterium is a commensal in the gastrointestinal and genitourinary tracts of healthy human adults. At any given time,10-30% of all healthy women are carriers of this bacterium which is present in their vagina and/or rectum. Vaginal colonization by GBS during pregnancy is associated with life threatening neonatal infections acquired during passage through the birth canal and it has been the most frequent cause of neonatal meningitis in infants. GBS has been associated with low birth weight, preterm delivery, prelabour rupture of membranes, stillbirth and neonatal death suggesting that it has marked predilection for pregnant women, fetus and neonates. **Aim**: To study the prevalence of Group B Streptococci in Pregnancy and study the maternal and fetal outcome. **Methods**: This is a prospective observational study performed from 2023 to 2025. Detailed history of each case was taken and Recto-vaginal swabs were taken from the healthy antenatal mothers between 35-37 weeks. The swabs were cultured on differential media HiCrome StrepB (Himedia) selective agar base with GCN Selective Supplement containing colistin, nalidixic acid and gentamicin. The cultured plates were incubated at 37°C overnight.The blue coloured colonies were identified as Group B Streptococcus (GBS). All patients testing positive for Group B Streptococci were given Intrapartum Antibiotic Prophylaxis using Ampicillin 2g i.v initial dose followed by 1g i.v 6 hourly until delivery, if the patients were not allergic to penicillin. If allergic, alternative antimicrobials used for prophylaxis include cefazolin (2g i.v followed by 1g every 8h until delivery) or Vancomycin (1g i.v every 12h until delivery). The Fetomaternal outcomes were assessed in terms of preterm labour ,PROM/ PPROM ,UTI ,postpartum infections, stillbirth, neonatal sepsis and NICU Admission. **Results**: The prevalence of GBS colonization among pregnant women between 35-37 weeks was 66.49%, indicating a high level of colonization within this population. In the GBS positive group, PROM (Premature Rupture Of Membranes) was observed in 9.3% while only 7.69% of individuals in the GBS negative group presented with PROM which is statistically significant with a p value of 0.03. Episiotomy site infection was seen in 6.2% among the

GBS positive individuals which is comparatively higher than the incidence of episiotomy site infection among the GBS negative individuals, accounting for 3.08%.Surgical Site Infection(SSI),accounting for 13.95% was the most common maternal complication in the GBS positive group while in the GBS negative group, SSI was observed in only 7.69%.This poses a significant association between GBS colonization and Surgical Site Infection. In both the GBS-positive and GBS-negative groups, the majority of newborns—86.05% and 86.15%, respectively—did not require NICU admission. The NICU admission is comparable in both the groups which is attributed to the Intrapartum Antibiotic Prophylaxis(IAP). The mean hospital stay was longer for GBS-positive women at 5.88 days, compared to 4.89 days for GBS-negative women. **Conclusion**: Targeted screening and prevention strategies play a crucial role in minimizing feto-maternal complications, which can adversely affect the health of both the mother and the baby. Screening for GBS in late pregnancy and administering antibiotics during labour to those who test positive can help prevent neonatal infections. Due to the high prevalence of GBS colonization among pregnant women in this population, routine antenatal GBS screening between 35 and 37 weeks should be done. Routine antenatal GBS screening and Intrapartum Antibiotic Prophylaxis(IAP) should be endorsed to improve the maternal and neonatal outcomes

015: Periviable PROM: To Save or Let Go?

Suboohi Rizvi. Mother's Clinic and Ultrasound Centre

Background: Periviable PROM, a condition which is challenging not only the mother also puts Parents into an ethical dilemma. Defined as rupture of membranes between 20 0/7 and 25 6/7 weeks of gestation. Although the literature suggest less than1% of pregnancies are affected, but practically more cases are seen and the consequences for both the mother and the baby can be serious. The obstetrician too is heartbroken on losing a well-formed baby. **Aim**: The presentation is an effort to not only look into the causes, risk factors but also stresses the importance of correct counselling about the management options. **Methods**: Presenting cases of periviable PROM in which expectant management was given which although prolonged the latency period but the overall fetal outcome was not favourable. Various papers and guidelines were studied to understand the protocols to be followed for patient counselling and management. **Results**: Although a lot has changed over the previous years in the management of Preterm fetuses but not much has changed in terms of morbidity and in periviable pregnancy in terms of immediate and longterm health issues. Maternal morbidity is also a very important risk. **Conclusion**: All patients with Periviable PROM should have a clear counselling about the benefit and risk of both immediate delivery and expectant management. The prognosis depends on many factors which include gestational age, birth weight, antenatal steroids and magnesium sulphate, sex and number of fetuses. Losing a baby even if periviable is a great loss to the parents and proper bereavement care should be provided.

016: Unmasking Fraser Syndrome at 28 Weeks POG: a Diagnostic and Ethical Dilemma In a Primigravida

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Fraser syndrome is an autosomal recessive disorder characterised by variable expression of cryptophthalmos, laryngeal stenosis, cutaneous syndactyly of the hands and feet, urogenital malformations, renal agenesis, and other minor anomalies. It has an incidence of 0.04 per 10,000 live births and 1.1 per 10,000 stillbirths prevalence is around 0.20 per 100,000 births, making it a rare genetic disorder. The outcome, treatment and prognosis depends on extent and severity of malformation. It can result in stillbirth, IUD, death in infancy or rarely survival. Timely detection permits informed decision-making, appropriate referral to genetics, and family support. Raising awareness and education on rare syndromes like Fraser amongst health care professionals enhances timely and accurate diagnosis through anomaly scans and multidisciplinary coordination and helps to provide an empathetic, evidence-based care for complicated fetal abnormalities. This poster strives to discuss a rare case of Fraser syndrome at 28 weeks period of gestation, its etiology, presentation , diagnostic criteria, prenatal diagnostic tests and future fertility options.

017: Decoding Stillbirth: a Six-Year Placental and Cord Pathology Study Using Amsterdam 2016 Classification

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Background: Placental and umbilical cord pathology provide crucial insights into stillbirth causes. The Amsterdam Consensus 2016 standardizes classification of placental lesions, improving diagnostic consistency and clinical counselling. **Aim**: To analyze placental and cord findings in stillbirths, classify lesions using Amsterdam 2016 criteria, and assess the diagnostic yield across gestational age groups. **Methods**: A retrospective study of 89 stillbirths at Mediscan, Chennai (2018–2024) was conducted. Placental gross and microscopic findings and cord morphology were reviewed. Lesions were classified as maternal vascular malperfusion (MVM), fetal vascular malperfusion (FVM), villitis of unknown etiology (VUE), or chorioamnionitis. Gestational age was grouped as early (22–27 weeks 6 days), late (28–36 weeks 6 days), or term (≥37 weeks). **Results**: Of the 89 cases, 59% were early stillbirths (n=53), 35% late stillbirths (n=31), and 6% term stillbirths (n=5). MVM was the most frequent lesion (~40%), predominantly in early and late groups. FVM accounted for ~17%, often with cord anomalies. VUE and chorioamnionitis were less common (11% and 5%). Overall, 73% of cases had an identifiable placental or cord cause, while 27% remained unclassified. **Conclusion**:Systematic placental and cord examination using the Amsterdam 2016 criteria yielded a probable cause in nearly three-fourths of stillbirths, underlining its critical role in identifying preventable factors and counselling families. Complete autopsy and better sampling can help address remaining unexplained cases.

018: Association of Fetal Head Circumference, Maternal Height, and Their Ratio In Predicting Risk of Cesarean Section Due to Labor Dystocia

Garima Singh, Seema Mehrotra. KGMU, Lucknow

Aim: This study investigates the predictive value of fetal head circumference (HC) measured using antenatal Ultrasonography, maternal height (MH), and the HC/MH ratio in determining the risk of cesarean section (CS) due to labor dystocia. **Methods**: Using data from a prospective observational study of 1216 women, the research explores sociodemographic, obstetric, and anthropometric parameters. **Results**: The HC/MH ratio emerged as the most effective predictor, with significant associations found between higher ratios and increased CS rates. **Conclusion**: The study emphasizes the clinical utility of integrating simple antenatal anthropometric measurements into routine obstetric risk assessments to reduce unnecessary CS and improve maternal and perinatal outcomes.

019: the Essential Role of Maternal Fetal Medicine In Reducing the Preventable Burden of Stillbirth: a North Indian Experience at a Tertiary Rural Centre

Ayushi Shukla, Shashi Bala Arya, Ruchica Goel. SRMS, Bareilly

Background: Congenital anomalies and fetal growth restriction significantly contribute to the burden of stillbirth. Inverted pyramid of antenatal care focuses on early identification and redressal of such complications where maternal-fetal medicine plays a vital role. **Methods**: Present study hospital is a tertiary care centre catering to rural population in a radius of 200 kilometres. Pregnancy outcomes were noted for women evaluated through a variety of specialised scans done by an operator trained in maternal-fetal medicine. **Results**: A total of 1388 scans were done over a period of 10 months. Among the 600 structural survey scans performed, 22 major life-limiting fetal malformations were diagnosed. Majority of these anomalies (59%, n=13) were diagnosed during the routine 19-24 weeks fetal anomaly scan while 41% cases (n=9) were first detected in late second/ third trimester. Central Nervous System (n=8) and Cardiovascular (n=6) anomalies were major contributors. A substantial portion of preventable anomalies in the form of neural tube defects were diagnosed in 27% (n=6) women. Among the 9 pregnancies with late detected malformations, 4 resulted in antepartum stillbirth while 1 had intrapartum demise. The remaining 4 babies expired within 24 hours of birth. Out of 900 fetal growth scans performed in study period, 102 were detected with fetal growth restriction as per Barcelona protocol. Incidence of fetal growth restriction (FGR) in study cohort was 11.3%. 17 women (14.5%) had early-onset FGR, with a high rate of emergency Caesarean section (52.9%, n=9) and stillbirth (35.3%, n=6). The same were relatively low in late-onset FGR group; stillbirth (8.2%, n=7) and emergency CS (36.5%, n=31). **Conclusion**: Proactive early-stage screening and risk assessment during pregnancy through structured evaluation and specialized ultrasound scans play a pivotal role in reducing burden of stillbirth.

020: Maternal and Perinatal Outcomes Among Pregnant Women With Idiopathic Polyhydramnios- a Retrospective Study

Deepthi. IMS, BHU, Varanasi

Background: Polyhydramnios is an abnormal increase of amniotic fluid identified by ultrasound and complicates 2% of pregnancies and can occur due to various maternal and fetal causes. Counseling the patient prenatally about the perinatal outcomes becomes challenging with isolated polyhydramnios. **Aim**: We aim to study the maternal and perinatal outcomes among pregnant women with isolated polyhydramnios. **Methods**: This retrospective study was done in a tertiary care hospital in southern India. All pregnant women who came for antenatal care or were referred for obstetric ultrasound to the division of fetal medicine between 2019 and 2024 and were found to have polyhydramnios with normal anatomical survey of the fetus at any period of gestation were included for the study. Obstetrics details, ultrasound findings, and perinatal information were retrieved from the electronic medical records. **Results**: Among the 256 women with polyhydramnios, 48 had isolated polyhydramnios with normal anatomical survey. 30 of them delivered in our hospital and infant follow-up data is available for 13 of them. Mean gestational age for detection of polyhydramnios was 28 weeks. Majority of women delivered by cesarean section(73.3%) at term. Among the 28 neonates- RDS(17.9%), hyperbilirubinemia(28.6%), hypoglycemia(28.5%), sepsis(14.3%), NICU admission(53.6%) were noted. Minor cardiac septal defects(6), urinary tract dilatation(2), one each of choroid plexus cyst, were noted on neonatal evaluation. Follow-up details available for 13 infants, 10 have normal development, 3 have global developmental delay. One baby WES showed schinzel giedion midface retraction syndrome. **Conclusion**: Close follow-up of the women with isolated polyhydramnios antenatally, tertiary care delivery and follow-up of those infants is necessary due to diagnosis of new abnormalities in postnatal period in this cohort

021: A Very Rare Case of Term Secondary Abdominal Pregnancy

Shuchi Jain, Anjali Sharma. IMS, BHU, Varanasi

Background: Abdominal pregnancy is a rare and potentially life threatening form of ectopic pregnancy, accounting for approximately 1%of all ectopic gestation. A 35 yr female,G4P2L2A1 , was referred to MCH Emergency due to failed Laprotomy from periphery with doubt of some huge uterine growth and + UPT test. Pulse- 110/min, BP- 90/60 mm Hg; UO- 30 ml/hr. P/A- Term size abdominal mass but FHS was not localized. P/S- mild bleeding +, P/V- term size uterine mass, B/L Adnexa - clear. HB -5.7 gm/dl ,Plt- 1.8 × 10^3/mm^3 ,TLC- 11k , B+ blood grp; No other investigation available. Emergency Exploratory laparotomy was done. Perop- A large vascular mass about 20x18 cm was present in POD which was attached to uterus. B/L tubes and ovaries could not be identified separately. Upon giving incision on the mass, stillborn baby along with placenta was delivered. Cystectomy done. Sample sent for HPE. Hemostasis secured. 2 units BT done. HPE – Tubal ectopic **Conclusion**: Abdominal pregnancy remains a rare and challenging form of ectopic gestation, often associated with high maternal morbidity and potential mortality. This case underscores the critical

role of early recognition through an Early Pregnancy Unit (EPU) and prompt ultrasound evaluation. Given the unpredictability and potential severity of complications, each case of abdominal pregnancy must be approached with individualized diagnostic and management strategies, carefully considering gestational age, implantation site, and maternal condition, to optimize outcomes.

022: Diagnostic and Prognostic Use of sFlt-1/PlGF Ratio In Preeclampsia : Enhancing Fetomaternal Outcomes in Cases With Diagnostic Dilemma

Rukhsar, Tamkin Khan, Tabassum Nawab, Hamid Ashraf. JNMC, AMU, Aligarh

Background: Preeclampsia affects 2–8% of pregnancies and remains a major cause of maternal and perinatal morbidity. Diagnosis is often difficult in cases where its clinical features overlap with conditions such as tropical infections, viral hepatitis, intrahepatic cholestasis of pregnancy, diabetic nephropathy, lupus nephritis, or chronic kidney disease. This may lead to unnecessary interventions or delays in appropriate treatment. The sFlt-1/PlGF ratio has emerged as an objective tool to improve diagnostic accuracy and short-term risk prediction. It helps in making timely clinical decisions and prevent iatrogenic preterm deliveries in diagnostically uncertain cases. **Methods**: A prospective observational study including 80 pregnant women over a period of 2 years at JN Medical College, Aligarh, who presented beyond 20 weeks of gestation with clinical features suspicious of preeclampsia. The sFlt-1/PlGF ratio was measured and interpreted using a cut-off value of 38. Final diagnosis and fetomaternal outcomes were analyzed using sensitivity, specificity, and predictive values of the test. **Result**: The test showed a sensitivity of 85.7%, specificity of 62.2%, PPV of 63.8%, NPV of 84.8%, and an AUC of 0.867 (95% CI: 0.788–0.946; $p<0.001$). Among 15 patients with confirmed preterm severe PE monitored for prognosis, patients with low ratios (≤38) showed no maternal adverse events and had a mean pregnancy prolongation of 21.5 ± 8.2 days. In contrast, those with high ratios (>210 or >655) had shorter prolongation (4.9 ± 2.6 days), with 55.5% experiencing fetomaternal complications. **Conclusion**:The sFlt-1/PlGF ratio helps differentiate preeclampsia from overlapping conditions in resource-limited settings where exclusion of HDP may reduce unnecessary interventions. The ratio also has prognostic value that supports individualized management in severe preterm cases, contributing to improved maternal and fetal outcomes in diagnostically challenging situations.

023: Estimation of Fetal Birth Weight at Term Pregnancy by Various Methods and Its Correlation With Actual Birth Weight

Surbhi Chauhan. HIMS, Sitapur

Background: Accurate estimation of fetal birth weight (EFW) at term is essential for guiding obstetric decisions and preventing complications such as shoulder dystocia, unnecessary cesarean deliveries, and neonatal morbidity. In clinical practice, both clinical and ultrasonographic methods are used, but their relative accuracy remains an area of ongoing research. **Aim**: This hospital-based

observational cross-sectional study aimed to evaluate and compare the effectiveness of clinical methods (Dare's and Johnson's formulas) and ultrasonographic methods (Hadlock's formula) in estimating fetal weight at term and correlating it with actual birth weight (ABW). **Methods**: A total of 290 antenatal women with singleton, cephalic pregnancies at 37- 40 weeks of gestation were included. Clinical measurements such as symphysio-fundal height and abdominal girth were used for Dare's formula, while fundal height and head station were considered for Johnson's formula. For the Hadlock method, ultrasonographic parameters including biparietal diameter, head circumference, abdominal circumference, and femur length were recorded. Data from all 290 cases were analyzed using SPSS version 26. **Results**: The results showed that all three methods estimated fetal weight with comparable accuracy, and there was no statistically significant difference between the estimated and actual birth weights across methods ($p > 0.05$). Thus, both clinical and ultrasonographic methods were found to be equally effective in estimating fetal weight at term. **Conclusion**: This finding reinforces the reliability of clinical methods, especially in low-resource settings, and supports their continued use in routine antenatal care alongside ultrasound-based methods.

024: Thyroid Dysfunction in Abnormal Uterine Bleeding in Reproductive Age Group

Harshita Mishra. HIMS, Sitapur

Background: Abnormal uterine bleeding (AUB) is a common gynecological complaint affecting nearly 30% of women in the reproductive age group. While many cases have no clearly identifiable cause, thyroid dysfunction is increasingly recognized as an important systemic contributor. Thyroid hormones have a crucial role in maintaining normal menstrual and reproductive function. Both overt and subclinical thyroid disorders can lead to menstrual irregularities, often mimicking other gynecologic or hormonal pathologies. **Methods**: This cross-sectional observational study was conducted over 18 months at a tertiary care center, involving 150 women aged 18 to 45 years presenting with AUB. Patients with identifiable pelvic pathology, bleeding disorders, or medications affecting thyroid function were excluded. A detailed menstrual history, clinical examination, and thyroid function tests including TSH, Free T3, and Free T4 were performed. **Results**: The study found a high prevalence of thyroid dysfunction in women with AUB. The most frequent disorder was subclinical hypothyroidism, followed by overt hypothyroidism, both commonly presenting with menorrhagia and polymenorrhea. In contrast, hyperthyroidism was less common and typically associated with oligomenorrhea. **Conclusion**: These findings underline that thyroid abnormalities, particularly subclinical hypothyroidism, are often overlooked but play a significant role in the etiology of AUB. Incorporating routine thyroid screening in the evaluation of women with abnormal bleeding is a non-invasive and cost-effective strategy. It allows for early identification and appropriate medical treatment of underlying thyroid disorders, potentially reducing the need for hormonal therapies or surgical interventions. The study concludes that recognizing and correcting thyroid dysfunction can significantly improve menstrual health and

reproductive outcomes. Therefore, thyroid screening should be standard practice in evaluating women with AUB in the reproductive age group.

025: an Open-Label, Randomized Controlled Trial To Compare Efficacy of Letrozole With Misoprostol Versus Mifepristone With Misoprostol for Medical Termination of Pregnancy

Arusha Tiwari. KGMU, Lucknow

Aim: This study aimed to evaluate the efficacy of Letrozolewith Misoprostol compared to the standard regimen of Mifepristone with Misoprostol for medical termination of pregnancy (MTP). The primary objective was to compare complete abortion rates and induction-to-abortion interval in both first and second trimester abortions. **Methods:** An open-label, randomized controlled trial was conducted over one year. A total of 150 women seeking MTP were randomly allocated into two groups (n=75 each) using a computer-generated randomization sequence. Group A received Letrozole 10 mg for three consecutive days followed by Misoprostol, while Group B followed the standard Mifepristone with Misoprostol regimen. Primary outcomes assessed were complete abortion rates and induction-to-abortion interval in both trimesters, analyzed at 95% confidence interval and 80% power. **Results:** Baseline variables like age, parity, gestational weeks were comparable across both groups. Complete abortion rates were significantly higher in the Letrozole + Misoprostol group (90.6%) compared to the Mifepristone + Misoprostol group (82.6%) in the first trimester. In the second trimester, the complete abortion rate was 85.3% in the Letrozole group compared to 79.2% in the Mifepristone group. The induction-to-abortion interval was shorter in the Letrozole group, with a mean duration of 6.2 ± 1.4 hours in the first trimester and 9.5 ± 2.1 hours in the second trimester, compared to 7.8 ± 1.6 hours and 11.2 ± 2.4 hours in the Mifepristone group, respectively. **Conclusion:** Given its cost-effectiveness and widespread availability, Letrozole presents itself as a viable alternative for MTP, particularly in resource-limited settings where Mifepristone availability may be restricted.

026: Critical Analysis of Three Delay Model In Maternal Mortality In Tertiary Centre: Prospective Observational Study of Three Delay Model In Maternal Mortality In Tertiary Centre

Manvi Garg, Sujata Deo. KGMU, Lucknow

Aim: Identifying the prevalence of each delay type in maternal mortality cases and proposing actionable interventions to mitigate these barriers. **Methods:** Study was conducted from December 2023 to December 2024 at the Department of Obstetrics and Gynaecology, King George's Medical University (KGMU), Lucknow. The study included 210 maternal deaths identified from various hospital units. Data was collected using standard verbal autopsy interviews with relatives and members familiar with the deceased's health-seeking pathway. **Results:** The most prevalent delay was Delay 1 (49%), often due to temporary symptom relief and lack of awareness of danger signs. Delay 2 was seen in(44.5%)of cases, primarily due to late referrals and transport barriers. Delay 3, though less frequent (6.5%), was still significant—caused mainly by complications during treatment and shortages in blood or equipment. The leading direct causes of maternal

death included obstetric hemorrhage (18.6%), eclampsia (13.3%), and sepsis (8.1%), while cardiac and liver disorders were major indirect contributors. **Conclusion**: The findings underscore the complexity of maternal mortality and the intertwined nature of delays at different stages. Improving referral systems, ensuring respectful and timely care, and strengthening antenatal education and community awareness are critical to reducing preventable maternal deaths. The Three Delays Model remains a practical framework for evaluating and addressing gaps in maternal healthcare systems.

027: Prenatal Diagnosis of Compound Heterozygous BRCA2 Mutation In a Fetus: Expanding the Clinical Relevance of BRCA Beyond HBOC.

Sangeeta Tvinwal, Rashmi Bagga, PK Saha, Rimpi Singla. PGIMER, Chandigarh.

Background: While BRCA2 gene mutations are classically linked to Hereditary Breast and Ovarian Cancer (HBOC) syndrome, biallelic (compound heterozygous) BRCA2 mutations cause Fanconi Anemia Type D1, an autosomal recessive disorder characterized by congenital anomalies, bone marrow failure, and early-onset malignancies. Prenatal identification of this condition is rare but crucial for decision making. **Case**:A 35-year-old gravida 3 para 2 woman at 23 weeks period gestation presented for fetal genetic evaluation. The couple had a significant family history of childhood malignancy:First child was accidentally diagnosed with acute lymphoblastic leukemia (ALL) at 1.5 years of age and died due to chemotherapy-related complications. Second child is currently undergoing treatment for unilateral retinoblastoma and recently diagnosed with ALL. To investigate the underlying cause, Next-Generation Sequencing (NGS) was performed on the affected child, revealing compound heterozygous BRCA2 mutations. This was followed by Sanger sequencing of both parents:Father: Heterozygous for BRCA2 c.523>T, Mother: Heterozygous for BRCA2 c.8363>A. Index fetal testing subsequently confirmed compound heterozygous BRCA2 mutations, consistent with Fanconi Anemia Type D1, indicating a poor long-term prognosis.In view of the genetic diagnosis and the burden of existing malignancy in one living child, the couple opted for medical termination of pregnancy (MTP). They were counseled extensively and advised Vitro Fertilization (IVF) with Preimplantation Genetic Testing for Monogenic Disorders (PGT-M) for future pregnancies. **Conclusion**: Early identification through NGS and confirmatory testing enables timely and informed reproductive choices for the couple. This helps reducing the emotional, genetic and clinical burden on the family.

028: Early Prediction of Stillbirth Using Combined First Trimester Screening for Preeclampsia Introduction

Aishwarya Rai. UPUMS, Saifai

Background:Stillbirth remains a global health concern, with 2.6 million cases annually, mostly in low- and middle-income countries. Effective prevention requires early risk prediction, managing maternal conditions, treating infections, and making timely delivery decisions. No universal risk assessment tool exists. **Aim**: This study evaluates the accuracy of combining these factors to

predict stillbirths at 11-13 weeks' gestation. **Methods**: Retrospective cohort of pregnant women for first-trimester preeclampsia combined screening in Jakarta, August 2019 to December 2021. 11-13 weeks or 45-84 mm CRL measurement Singleton pregnancies with morphologically normal live birth or stillbirth >24 weeks of gestation. Cutoff values determined by ROC curve analysis, Binary Logistic Regression. **Results**: Incidence of still births is 0.8%. The incidence of stillbirth in our population (0.79%) has currently surpassed the ENAP goal (0.9%). The combination of maternal factors, MAP, UtA-PI, and PlGF had the best AUC value to predict all placental dysfunction and non-placental dysfunction-related stillbirths. **Conclusion**: Screening at 11-13 weeks gestation using a combination of maternal factors, MAP, UtA-PI, and PlGF, can predict a high proportion of stillbirths. Our model, novel in its inclusion of MAP, has good accuracy for predicting stillbirths, predominantly placental dysfunction-related stillbirths.

029: Changing Trends of Causation for Maternal Mortality Over 5 Years In a Tertiary Care Centre of Northern India.

Apoorva. MLN Medical College, Prayagraj

Background: Maternal Mortality Ratio (MMR) in India has shown a steady national decline, yet tertiary care centers report persistently higher rates. A shift in leading causes from hemorrhage to hypertensive disorders necessitates close evaluation of maternal deaths in such centers to reshape policies and interventions effectively. **Methods**: A retrospective observational study was conducted in the Department of Obstetrics and Gynaecology, SRN Hospital, MLN Medical College Prayagraj, and affiliated centers. All maternal death records from January 2020 to December 2024 were reviewed after institutional ethical approval. **Results**: A total of 148 maternal deaths were documented over 5 years. Most deaths (73.4%) occurred in women aged 20–30 years. Significantly higher mortalities were seen among multiparous women (62.8%), low socioeconomic groups (87.9%), unbooked (92.1%), and referred patients (88.3%) ($p<0.05$). Among referrals, 91.4% were in poor condition on arrival, a highly significant finding ($p=0.001$). Cause-wise trends revealed a noticeable decline in hemorrhage-related deaths, from 35.7% in 2020 to 24.6% in 2024. Conversely, hypertensive disorders rose from 33.3% to 41.5% during the same period. Sepsis and anemia-related deaths remained fairly constant. **Conclusion**: Despite overall declines, the MMR at this tertiary center remains above national averages, largely due to unbooked and critical referrals reflecting systemic delays (especially Type II delay in reaching adequate care). Hypertensive disorders have surpassed hemorrhage as the leading cause. Emphasis on robust antenatal care and early risk identification is essential to reduce maternal deaths.

030: Ease of delivery: A comparison of three regimen for Induction of labor in Intrauterine fetal death

Vrunda Joshi, Sudha Rajpoot. Gajra Raja Medical College Gwalior

Aim: To compare effectiveness, induction delivery interval, side effects and complications of misoprostol alone, intracervical foleys with misoprostol and mifepristone with misoprostol for

induction of labour in Intrauterine foetal deaths. **Methods**: A total of 93 pregnant women with ultrasonographical documented intrauterine fetal deaths above 24 weeks of gestation were systematically allocated to one of the three groups. Group A given tab mifepristone 200mg orally followed by tab misoprostol vaginally 24 hours later in repeated doses differing with the gestational age, Group B given intracervical extra-amniotic Foley catheter followed by tab misoprostol vaginally, Group C given tab misoprostol vaginally. drug instillation-labor onset interval, onset delivery interval, side effects, patient satisfaction and maternal outcome of each group noted and compared. **Results**: There was a significant difference between the above parameters of the three groups. Group A scoring better in onset delivery interval, side effects and patient satisfaction. **Conclusion**: A combination of oral tab Mifepristone followed 24 hours later by tab misoprostol vaginally in incremental doses is found to be a patient friendly and efficacious regimen for induction of labour and delivery in intrauterine foetal death.

031: Sequential Organ Failure Assessment Score [SOFA Score] for Evaluating Outcome of Severe Maternal Morbidity in Obstetric Intensive Care.

Apoorva. MLN Medical College, Prayagraj

Background: Severe Maternal Morbidity (SMM) is a progressive, life-threatening condition in pregnancy. Without timely intervention, it can lead to maternal death. Early identification of patients at risk of organ failure may improve outcomes. **Aim**:To assess the prognostic accuracy of the Sequential Organ Failure Assessment (SOFA) score in predicting organ failure and maternal outcomes in obstetric ICU patients. To correlate SOFA, quick SOFA (qSOFA) scores, and ICU stay duration with maternal mortality. **Methods**: A prospective observational cohort study was conducted on 164 women admitted to a 10-bedded multidisciplinary ICU. Patients were monitored daily; total and maximum SOFA scores were calculated. qSOFA was recorded at admission. ROC analysis was used to determine optimal cut-off values. Mean SOFA, qSOFA scores, and ICU stay duration were compared between survivors and non-survivors. **Results**:The mean age was 25.78 ± 3.97 years. Eclampsia (36.58%) and haemorrhage (20.73%) were the leading causes of ICU admission. The overall maternal mortality rate was 28.7%. Non-survivors had significantly higher maximum SOFA scores (14.1 ± 2.7) than survivors (6.9 ± 1.9). A SOFA cut-off of 10 yielded an AUC of 0.988 (95% CI: 0.977–1.000; $p<0.001$), indicating high predictive accuracy. qSOFA scores were also higher among non-survivors (2.8 ± 0.4 vs 1.6 ± 0.6). Prolonged ICU stay was significantly associated with increased mortality. **Conclusion**:SOFA score shows strong predictive and diagnostic ability for maternal mortality in SMM cases admitted to ICU. qSOFA and duration of ICU stay also correlate with poor outcomes.

032: Stillbirth In a Case of Transfusion-Dependent HbE Thalassemia: a Preventable Adverse Outcome

Vishali, Sujata Siwatch. PGIMER, Chandigarh

Transfusion-dependent thalassemia (TDT), particularly HbE thalassemia, is a chronic hematologic disorder that poses serious risks in pregnancy, including fetal growth restriction, low birth weight, preterm delivery, and stillbirth. Despite advances in management, poor antenatal surveillance remains a key contributor to adverse outcomes in such high-risk pregnancies. **Case:** We report a case of a 25-year-old primigravida, Mrs. N, with a history of transfusion-dependent HbE thalassemia since adolescence. She had been married for three years and conceived spontaneously. Her first antenatal visit occurred late, at 20+4 weeks gestation, and she had a total of only three antenatal visits at our center. At 35+3 weeks, she was referred from a peripheral center (Yamunanagar) with intrauterine fetal demise (IUFD) and severe thrombocytopenia. She had experienced decreased fetal movements for one day prior to referral. On admission, her vitals were stable, the uterus corresponded to 28 weeks gestation, and fetal heart sounds were absent. Cervical examination confirmed a closed and uneffaced cervix. Investigations confirmed IUFD. The pregnancy was managed expectantly, and the stillbirth was classified under preventable causes due to FGR. **Discussion:**Pregnancies in women with TDT require coordinated multidisciplinary care and close fetal surveillance, particularly in the third trimester. Guidelines from ACOG and RCOG recommend frequent monitoring, management of iron overload, and individualized delivery planning. In this case, delayed antenatal booking, infrequent follow-up, and inadequate fetal surveillance likely contributed to the stillbirth. Earlier recognition of fetal compromise and appropriate interventions could have changed the outcome. This case highlights the critical importance of early and structured antenatal care in patients.

033: Clinical Outcome of Mosaic Embryo Transfer

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Aim: To look into the chromosomal results of mosaic embryo transfer and prenatal ultrasound findings. **Methods:** From January 2021 to 2025, pregnant women who had mosaic embryo transfers at Javitri Hospital Lucknow, after blastocyst-stage preimplantation genetic testing for aneuploidy (PGT-A) were the subjects of this retrospective study. Using standard procedures, trophectoderm biopsy specimens were obtained, and next-generation sequencing profiles were classified as mosaics when they showed copy number counts between 20 and 80 percent. Analysis was done on the PGT-A results, amniocentesis results, prenatal ultrasound results, and pregnancy outcomes. **Results:** Out of the 88 mosaic embryos that were transferred, 77 were successfully implanted. Out of 58 patients with singleton pregnancies, 67 embryo-maintained pregnancies (87 percent) lasted longer than 11 weeks. The chaotic subtype exhibited the lowest ongoing pregnancy rate, and embryo with high-level mosaicism had fewer number of ongoing group, compared to the total study group and the successful implantation group. **Conclusion:** Our study shows that mosaic embryos can develop into euploid healthy infants with various levels or types of mosaicism,

although the postnatal follow-up data are limited. This study is invaluable for counselling clinical results after mosaic embryo transfer, reassuring that, if patients do not have euploid embryos available, mosaic embryos can also be a viable option for transfer.

034: Study of Perception of Respectful Maternity Care Amongst Postnatal Women Before and After Training of Healthcare Workers

Monika Singh. KGMU, Lucknow

Background: Respectful Maternity Care (RMC) is recognized globally as a fundamental human right and a critical component of quality maternal healthcare. Violations of RMC remain prevalent, especially in low-resource settings, contributing to poor maternal outcomes and diminished trust in healthcare systems. **Aim**: To assess the perception of RMC among postnatal women before and after structured training of healthcare workers. Objectives included evaluating baseline perceptions, providing RMC training to labor room staff, assessing post-training perceptions, and comparing findings. **Methods**: A cross-sectional comparative study was conducted at KGMU. Postnatal women admitted before and after a structured RMC training intervention for healthcare workers were surveyed using validated RMC perception questionnaires. The intervention included modules on dignity, privacy, informed consent, and effective communication. **Results**: Baseline perceptions of RMC among postnatal women were suboptimal, with issues related to lack of privacy, poor communication, and non-consented care. After the RMC training, there was a significant improvement in women's perceptions, with higher scores across domains of dignity, autonomy, and supportive care. The intervention demonstrated that targeted training could effectively enhance respectful maternity care practices, thereby improving patient satisfaction and trust. **Conclusion**: Educating healthcare workers on RMC principles significantly improves the perceived quality of care among postnatal women. Such interventions are vital for promoting a patient-centered approach, reducing maternal morbidity, and reinforcing women's rights during childbirth. Implementing structured RMC training at scale could transform maternity care delivery and strengthen health system responsiveness.

035: Twin Related Stillbirths – What More Can We Do?

Kritika Bhargava, Sujata Siwatch. PGIMER, Chandigarh

Aim:To estimate the risk of stillbirth in dichorionic and monochorionic twins, and to evaluate the relevant causes of stillbirth in twins. **Methods**: Retrospective observational data for the year 2024 was done ifrom Jan to Dec 2024. 257 twin deliveries took place and a total number of 16 Stillbirths in twin deliveries were studied for causes according to their chorionicity. **Results**: Causes of stillbirth were classified using the ICDPM classification, and studied under various headings. Most common cause included TTTS and isolated fetal growth restriction. Main causes included twin–twin transfusion syndrome in MCDA twins and isolated FGR in DCDA twins. **Conclusion**: The risk of stillbirth is significantly higher in twins, both MCDA and DCDA compared to singletons. Most common causes included isolated fetal growth restriction and TTTS.

036: the Impact of Medical Nutrition Therapy on Birth Weight Outcome In Women Diagnosed With Gestational Diabetes Mellitus(GDM) Compared to Non-GDM

Shubhangi Singh, Preeti Bala Singh, Aradhana Singh, Shikha Seth. AIIMS Gorakhpur

Background:Gestational Diabetes Mellitus (GDM) poses risks for adverse neonatal outcomes, with Medical Nutrition Therapy (MNT) being the first-line intervention. **Aim**: To evaluate the impact of MNT duration on birth weight and other neonatal outcomes in GDM pregnancies compared to non-GDM controls. **Methods**: A retrospective analysis was conducted on 145 GDM and 145 non-GDM women, matched for gestational age. All GDM cases were diet-controlled without insulin. Demographic, clinical, and neonatal parameters were extracted from hospital records at AIIMS Gorakhpur (Jan–Dec 2024). **Results**: GDM women were significantly older (p=0.002) but otherwise demographically comparable to non-GDM women. The mode of delivery and birth weights were similar between groups. Within the GDM cohort, varying MNT durations did not significantly influence birth weight. However, 5-minute APGAR scores were significantly lower in GDM neonates (p=0.025). **Conclusion**: Diet-controlled GDM pregnancies can achieve neonatal birth weights comparable to non-GDM pregnancies. The duration of MNT did not significantly impact birth weight, though slight differences in APGAR scores warrant further study.

037: Outcomes of Trial of Labor After Cesarean In Terms of Successful VBAC, Ruptured Uterus, Still Birth and Scar Dehiscence In NVD and Cesarean Section

Rachan Kour, Aradhana Singh. AIIMS Gorakhpur

Background: Trial of labor after cesarean (TOLAC) offers an opportunity for vaginal birth after cesarean (VBAC), reducing the risks associated with repeat cesarean sections. However, TOLAC carries potential complications including uterine rupture, stillbirth, and scar dehiscence. Evaluating these outcomes is critical to inform obstetric decisions. **Aim**:To assess the maternal and fetal outcomes of TOLAC in terms of successful VBAC rate, incidence of uterine rupture, stillbirth, and scar dehiscence in women undergoing either normal vaginal delivery or emergency cesarean section. **Methods**:A retrospective observational study was conducted over a 1 year at a tertiary care center. Medical records of women with a previous lower segment cesarean section (LSCS) who underwent TOLAC were reviewed. Data were analyzed for rates of successful VBAC, uterine rupture, stillbirth, and scar dehiscence, and outcomes were compared between those delivering vaginally and those requiring cesarean. **Results**: Out of 60 women who underwent TOLAC, 50% achieved successful VBAC. Uterine rupture occurred in 4 cases, scar dehiscence was noted in 20 and stillbirth was reported in 10. The rate of scar dehiscence and uterine rupture was significantly higher in the cesarean group compared to the NVD group (p-value <0.05). **Conclusion**: TOLAC can be a safe and effective strategy for selected women, with a high success rate of VBAC. However, careful monitoring is essential to minimize the risk of serious complications like uterine rupture and scar dehiscence. Individualized assessment and vigilant intrapartum care are key to optimizing maternal and fetal outcomes.

038: Determinants of Stillbirth and Adverse Live Birth Outcomes In High Risk Pregnancies: Evidence From a Retrospective Observational Study

Priyanka Shettar, Aradhana Singh. AIIMS Gorakhpur

Background: High-risk pregnancies are marked by maternal or fetal conditions that significantly increase the likelihood of adverse outcomes. Among these, stillbirth represents one of the most devastating complications, while live birth under such high-risk conditions remains a key indicator of successful perinatal care. **Aim**: This study aims to evaluate and compare the clinical profiles of stillbirths and live births in high-risk pregnancies, with the goal of identifying contributing factors and preventive strategies. **Methods**: A retrospective observational study was conducted in the Department of Obstetrics and Gynecology over a period of [JAN 2024-JUNE 2025]. A total of 76 high-risk pregnancies were included, divided into two arms: 38 cases resulting in stillbirth and 38 in live birth. High-risk status was defined based on the presence of conditions such as hypertensive disorders, diabetes, severe anemia, Intrauterine growth restriction (IUGR), placental abnormalities ,previous 1 lscs , short icp and maternal age ≥35 years. Data were collected from hospital records and analyzed to identify patterns and associations. **Results**: Among the stillbirth group, the most prevalent risk factors were severe preeclampsia, placental abruption, and IUGR. In contrast, the live birth group showed higher rates of early antenatal registration, consistent follow-up, and timely obstetric intervention. Administration of corticosteroids in preterm cases and decision-making regarding early delivery played a key role in favorable outcomes. Statistically significant differences ($p < 0.05$) were observed in antenatal care utilization and timing of diagnosis between the two groups. **Conclusion**: This study highlights that stillbirths in high-risk pregnancies are often linked to preventable or manageable conditions. Emphasis on early identification, structured antenatal care, and prompt multidisciplinary intervention can significantly reduce perinatal mortality and improve live birth outcomes in high-risk obstetric populations.

039: Biophysical Markers at 34-36 Weeks in the Prediction of Adverse Perinatal Outcome – Prospective Observational Study

Sangeeta Tvinwal, Veenu Dawra, SC Saha, Bharti Sharma. PGIMER, Chandigarh

Background: Abnormalities in uteroplacental perfusion are key contributors to adverse pregnancy outcomes. Impaired placental function leads to fetal hypoxia and growth restriction, which are associated with increased risks of preeclampsia, stillbirth, cesarean delivery, and NICU admission. Doppler studies of uterine and umbilical arteries offer non-invasive assessment of placental circulation. fetal weight alone is insufficient to identify fetuses at risk, particularly in late-onset FGR, which often occurs in constitutionally normal-sized fetuses. **Aim** : To evaluate whether the addition of biophysical (UA PI, UtA PI, CPR) to routine ultrasound biometry at 34–36 weeks can improve the prediction of adverse perinatal outcomes in late gestation. **Methods**: A prospective observational study was conducted in the Department of Obstetrics and Gynecology, PGIMER Chandigarh. 122 pregnant women with singleton pregnancies who visited the routine ANC clinic of the department at or after 34 weeks to 36 weeks of gestation between July 2021 to July 2022 .

Results: The diagnostic performance of uterine artery Doppler-sensitivity and specificity was 55.9% and 50.6% respectively with p value of .682, which is not significant. The diagnostic performance of umbilical artery Doppler- sensitivity and specificity was 57% and 47% respectively with p value of .925. CPR less than fifth centile particularly in SGA fetuses had been found 1o predict fetuses with adverse perinatal outcomes. So in our study, the diagnostic performance of maternal and fetal Doppler with respect to predicting adverse perinatal outcome by logistic regression analysis was not statistically significant. **Conclusion**: The diagnostic performance of Uterine and fetal Doppler for predicting composite adverse outcome is poor.

040: Fasting and Postprandial Total Serum Bile Acid Levels In Term Pregnancy and It's Associated Neonatal Outcomes.

Anshu Choudhary, Renu Singh, Anjoo Agarwal, Mona Asnani. KGMU, Lucknow

Aim:To evaluate fasting and postprandial TSBA levels in healthy term pregnancies and assess their association with neonatal outcomes. **Methods**:This cross-sectional study was conducted at Queen Mary Hospital, KGMU, Lucknow.. A total of 201 women with uncomplicated singleton term pregnancies were enrolled. Fasting and 2-hour postprandial TSBA levels were measured. Neonatal outcomes—including birth weight, Apgar scores, and NICU admission—were recorded and analysed. **Results**: Mean fasting TSBA was 6.91 ± 3.22 µmol/L; postprandial levels rose to 9.27 ± 3.67 µmol/L. While no significant association was found between mean TSBA and neonatal outcomes overall, postprandial TSBA ≥10 µmol/L was associated with a twofold increased risk of low Apgar at 1 minute (OR 2.04; p=0.034). **Conclusion**:Postprandial TSBA levels may serve as early indicators of subtle neonatal compromise. Establishing pregnancy-specific reference ranges is essential for improving perinatal risk.

041: Stillbirth and Its Determinants- an Observational Study From Uttarakhand

Arish Khan, Purnima Upreti. Swami Rama Himalayan University

Background: Stillbirth is defined as birth of a baby with no signs of life at or after 28 weeks or >1000gm or crown heel length >35cm. Various studies are done to ascertain causes of stillbirths and to classify them according to classification systems like ReCoDe, INCODE,CODAC etc. **Aim**: To determine the etiology of stillbirths, to classify causes as per ReCoDe classification system,to ascertain correlation between the variables if any and number of stillbirths. **Methods**: 60 subjects were studied to find out association between stillbirths and sociodemographic profile, obstetric profile and maternal health conditions. **Results**: Maternal conditions were leading contributors 31.67%; hypertensive diseases in pregnancy were most common cause of stillbirths followed by placental factors 30% (placental insufficiency and abruption majorly) followed by fetal conditions 16.67% (fetal growth restriction majorly). In our institution, out of 1800 deliveries in a year,60 were stillbirths giving rate of stillbirth as 3.19% which is considerably lower than patterns observed in developing countries. **Conclusion**: This study demonstrated the efficacy of ReCoDe classification system in analyzing stillbirths ,achieving 100% classification of all 60 cases examined.

042: Difference In Short- and Long-Term Neonatal Outcome Comparing Magnesium Sulphate In Small Dose (4-Gram) Versus Controls In Preterm Infants

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Background: Preterm infants are at great risk of neurological impairments. **Aim**: This study aimed to evaluate what is the difference in short- and long-term neonatal outcome comparing magnesium sulphate in small dose (4-gram) versus controls. **Methods**: Prospective cohort study was conducted in the Department of Obstetrics and Gynaecology over a period of 4 years. Group A comprised of the study group (intravenous 4-gram magnesium sulphate was given over 20 min). Group B consisted of control group who did not receive magnesium sulphate. **Results**: The study population comprised of 116 pregnant women who intravenous bolus of 4- gram MgSO4 while the control group comprised of 95 pregnant women who did not receive MgSO4. Fewer neonates in the MgSO4 group required intubation at birth (32% vs. 52%) or chest compression (4% vs. 6%), however the difference was not statistically significantly (p=0.175 and p=0.329). Neonatal brain ultrasound done in first month showed a significant reduction intraventricular haemorrhage of severe grade 3–4 IVH in the MgSO4 group (p = 0.016). **Conclusion**: MgSO4 administration was associated with a decrease in neonatal mortality before discharge (p = 0.039). Follow up at 3 years, showed a significant reduction in delayed milestones, visual impairment, Bayley score < 85 (p = 0.015). MgSO4 treatment antenatally was associated with lower risk of Cerebral Palsy (2.6% vs. 23.2%, p <0.01)

043: Psychosocial Impact of Stillbirth on Mothers: a Cross-Sectional Study

Preeti Rawat. GSVM, Kanpur

Background: Stillbirth is a much distressing event with many psychological and social consequences for affected mothers. Despite its impact, emotional and psychosocial responses to stillbirth remain under-researched. **Aim**: This study aims to explore the emotional, psychological, and social impact of stillbirth on mothers to better inform care strategies and support mechanisms. **Methods**: This is a cross-sectional, anonymous survey-based study conducted by resident doctors from the Department of Obstetrics & Gynecology. Mothers who experienced stillbirth were invited to participate voluntarily. The data collection tool included sections on demographic information, obstetric history, and a detailed psychological assessment capturing emotional responses, coping mechanisms, and the presence of psychological symptoms post-stillbirth. **Results**: significant proportion of participants reported feelings of grief, depression, anxiety, and social withdrawal. The emotional state varied with factors such as time since the stillbirth, gestational age at the time of loss, and unavailability of familial or psychological support. **Conclusion**: Stillbirth has a profound psychosocial impact on mothers. There is a critical need for structured psychological support and counseling services integrated into postnatal care for the mothers. Findings from this study can help us in delivering compassionate, evidence-based emotional care to the person who has just loss something the one whom she would have cared and loved her whole life.

044: Hypoglycemia With Jaundice In Pregnancy

Uma Pandey, Neha. IMS, BHU, Varanasi

Background: Jaundice in pregnancy is an uncommon but serious clinical condition that may complicate maternal and fetal outcomes. **Case**: A 23-year-old primigravida, unbooked, housewife from an upper middle-class background (as per modified Kuppuswamy scale) presented at 37+4 weeks of gestation with complaints of yellowish discoloration of urine and sclera for one week, decreased appetite for one week, and bilateral pedal edema for five days. These symptoms were of sudden onset and were associated with lower abdominal pain and 2–3 episodes of vomiting per day. Past history was not significant. On examination, the cervix was midline, early effaced, with one finger loose dilatation. Liquor was meconium stained, and the Bishop's score was 7/13. Fetal heart rate was 130 bpm and regular. Laboratory investigations revealed hemoglobin 8 g/dL, platelet count 60,000, total bilirubin 12 mg/dL, direct bilirubin 16 mg/dL, and prolonged PT/OT (111/116 seconds).A provisional diagnosis of jaundice with anemia in a primigravida at term was made. Prognostication and gastroenterology reference were obtained. Adequate blood and blood products were arranged. After counseling regarding maternal and fetal risks, the patient underwent emergency lower segment cesarean section on 19th October 2023 at 3:00 PM for meconium-stained amniotic fluid. Intraoperatively, 4 units of FFP and 1 unit of blood transfusion were given. A male baby weighing 2.5 kg was delivered with a poor APGAR score and transferred to NICU.Postoperatively, the mother developed hypoglycemia, which was managed with 5% dextrose infusion. This case highlights the importance of timely recognition and multidisciplinary management of jaundice complicating pregnancy to reduce maternal and perinatal morbidity and mortality.

045: Triumph Over a Giant: Successful Management of a Large Placental Chorioangioma

Pooja, Latika Chawla, Om Kumari, Shalini Rajaram, Jaya Chaturvedi. AIIMS Rishikesh

Background: Placental chorioangioma is the most common benign tumour of placenta, in approximately 1% of all examined placentas. Large chorioangiomas (>4-5cm) are rare, with an incidence of 1:3500 to 1:9000. These are associated with significant complications, including foetal anemia, cardiac dysfunction and polyhydramnios , fetal growth restriction and intrauterine fetal death. We present a rare case of a large placental chorioangioma managed successfully with favourable outcomes. **Case**: A 29-year-old primigravida was referred to our centre at 22 weeks POG with a suspected placental mass .Ultrasound revealed a 5.5 × 4.6 cm chorioangioma with increased vascularity on Doppler. Patient was followed up by serial ultrasound every week. The lesion remained stable until 28 weeks, after which it showed rapid growth, reaching 10 cm by 32 weeks, associated with polyhydramnios and elevated MCA PSV (>1.4 MoM), indicating fetal anemia. Echocardiography revealed cardiomegaly, cardiac hypertrophy, and tricuspid regurgitation. Given the gestational age, worsening hemodynamics, a decision was made for elective cesarean delivery at 33 weeks. A male baby weighing 2138g was born with Apgar scores of 7/8. Echocardiography showed mild right atrial and right ventricular dilatation. **Discussion**: Prenatal diagnosis relies on

targeted ultrasound with color Doppler. Early and structured follow-up is crucial to detect complications and guide management decisions. Invasive therapies may be considered when there is evidence of fetal compromise or hydrops, typically feasible up to 26–28 weeks of gestaion. However, these Interventions require expertise. **Conclusion**: Our case highlights that timely referral to a tertiary care center with fetal medicine expertise and NICU support improves neonatal survival despite high-risk features.

046: to Study Oxidative Stress and Antioxidant Status In Adolescents and Young Women's With Primary Dysmenorrhea

Monika Singh, Sujata Deo. KGMU, Lucknow

Background: Adolescence is a critical stage of human development, characterized by physical, emotional, and cognitive growth. Dysmenorrhea, a common health issue among young women, is a primary type of abdominal pain. **Aim**: To evaluate oxidative stress and antioxidant status in adolescents and young women with primary dysmenorrhea, as well as in those without the condition, and compare their levels. **Methods**: This case control study was conducted at KGMU, over a period of one year. Total 103 females between 11-24 years with primary dysmenorrhea were recruited. Healthy female adolescents served as controls. Samples were collected on menstrual days, separated, and stored in a deep freezer at 80°C. **Results**: 40 women (54.89%) had primary dysmenorrhea, and control group had 33 healthy women (45.21%). Females who experienced menarche at a younger age (≤12 years) were more likely to suffer from primary dysmenorrhea. 60% of females suffering from primary dysmenorrhea had a positive family history of the condition, as opposed to only 40% in the control group. Females with primary dysmenorrhea exhibited significantly decreased antioxidant defenses and elevated oxidative stress compared to participants without the condition. There was significant negative correlation between MDA and SOD levels in primary dysmenorrhea women, while a moderate positive correlation was observed between BMI and SOD levels. **Conclusion**: The study reveals a significant imbalance between oxidative stress and antioxidant defense in adolescents and young women with primary dysmenorrhea, suggesting oxidative damage may contribute to menstrual pain. Further research is needed to establish causal relationships and evaluate antioxidant supplementation effectiveness.

047: Successful Pregnancy In a Woman with Undiagnosed Coarctation of Aorta and Multiple Intracranial Aneurysms: A Case report

Kritika Agnihotri, Neeta Singh, Sangeeta, Ruchi Pandey. SGPGIMS, Lucknow

We report a rare and complex case of a 25-year-old primigravida presenting with hypertension, headache, vomiting and h/o fall with loss of consciousness at 26weeks of gestation. Patient underwent neuroimaging at a referral hospital and was found to have subarachnoid haemorrhage (SAH) and multiple intracranial aneurysms. She underwent Digital subtraction angiography (DSA) at our centre and was diagnosed with coarctation of aorta (distal to origin of left subclavian artery)

and multiple intracranial aneurysms. The patient opted to defer neurovascular intervention until after delivery, understanding the associated risks. Additionally, she also developed severe pre-eclampsia, and intrahepatic cholestasis of pregnancy. The case posed significant diagnostic and management challenges due to overlapping neurological, cardiovascular and obstetric risks. Achieving optimal blood pressure to balance blood pressure in descending aorta (post ductal) while minimising the risk of haemorrhage in intracranial aneurysm was the greatest challenge. Multidisciplinary team approach led to successful maternal stabilization and preterm delivery at 34 weeks via caesarean section. Both mother and neonate had favourable outcomes. This case underscores the importance of early diagnosis, vigilant monitoring, and interdisciplinary care in managing high-risk pregnancies with multisystem involvement.

048:Capacity Building in Obstetric Ultrasound: Simulation-Based Training for Early Detection and Monitoring of Fetal Growth Restriction To Reduce Stillbirth Risk

Latika Chawla, Rajan Kumar, Shalini Rajaram, Shalini Rao, Om Kumari, Jaya Chaturvedi. AIIMS Rishikesh

Background: Fetal Growth Restriction (FGR) is a leading cause of stillbirths. Timely detection and monitoring of FGR using ultrasound can significantly reduce stillbirths. Structured hands-on ultrasound training is lacking in current postgraduate OBG curriculum. **Aim**: To develop a simulation-based clinical teaching program to enhance residents' knowledge and skills in performing basic obstetric ultrasounds, focusing on detection and monitoring of FGR. **Methods**: A training program comprising of 14 modules on basic obstetric ultrasounds was created over 3 months. 24 newly enrolled junior residents without prior ultrasound experience were recruited. A two-day workshop included interactive module sessions and 6 h 30 min of hands-on training using an obstetric simulator. Pre- and post-tests assessed knowledge. Follow-up assessments were carried out at 1 and 3 months. Skill assessment at third month was conducted using an objective structured practical examination (OSPE), alongside image submission by residents. **Results**: There was significant improvement in marks, with a mean pretest score of 23 ± 2.7 out of 50 marks, post-test score of 37.85 ± 2.96 and stable scores (35.1 ± 3.21, 34.6 ± 2.91) during follow-up reviews. OSPE scores at third month averaged at 21.78 ± 2.6 (maximum marks 30); image assessment scores averaged at 82 ± 7.32 (maximum marks 100). Confidence levels in performing clinical ultrasound improved significantly after attending the module ($P < 0.0001$). **Conclusion**: Simulation-based teaching effectively enhanced residents' knowledge, skills, and confidence in performing obstetric ultrasounds, improving their ability to detect and monitor FGR, a key contributor to stillbirth. Incorporating such structured programs into postgraduate curricula can strengthen early diagnosis, timely intervention, and ultimately reduce stillbirths.

049: Leptospirosis. A Deadly Zoonotic Disease Leading to Maternal and Fetal Complications and Stillbirths.

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Background: Leptospirosis is a bacterial infection caused by a spirochete , transmitted through contact with contaminated water or soil, especially rat urine. During pregnancy, it can lead to severe complications, including miscarriage, preterm labor, fetal death, and maternal complications such as kidney or liver failure, MODS and even death. **Aim**: This case report aims to explore the causes, treatment, need of early suspicion, and diagnosis of leptospirosis in pregnant women presenting with jaundice, with the goal of preventing complications and improving maternal and fetal survival. **Case**: We present two cases of leptospirosis in pregnancy, both resulting in stillbirth and intrauterine death (IUD). One case was further complicated by maternal mortality. These cases are rare in Haryana, a non-endemic region for leptospirosis, highlighting the need for awareness and prompt diagnosis. We reviewed the clinical presentation, diagnosis, and management of the two cases, analyzing the factors contributing to the adverse outcomes. **Discussion**: Leptospirosis in pregnancy can have devastating consequences for both mother and fetus. Prompt diagnosis and treatment are crucial to minimize risks. Given the rarity of leptospirosis in non-endemic regions like Haryana, our cases highlight the importance of considering this diagnosis in pregnant women presenting with jaundice. Further study and discussion are needed to raise awareness and prevent complications and undiagnosed deaths.

050: Evaluation of Causes of Female Infertility at a Tertiary Care Center and Its Association with BMI

Srilatha Thammannagari. HIMS, Ataria, Sitapur

Background: Female infertility is a complex condition with significant social and emotional impact, particularly in rural communities. **Methods**: This prospective observational study was conducted at a tertiary care center and included 177 women aged 18–45 years presenting with primary or secondary infertility. Each participant underwent detailed clinical examination, hormonal profiling, transvaginal ultrasonography, hysterosalpingography, and other relevant investigations. The causes of infertility were categorized as ovulatory, tubal, uterine, ovarian, or unexplained, and their association with Body Mass Index (BMI) was analyzed. Tubal factors and ovulatory disorders were identified as the most common causes. Tubal pathologies, often linked to pelvic inflammatory disease or prior surgeries, were detected through HSG and laparoscopy. Ovulatory dysfunction, especially due to polycystic ovary syndrome (PCOS), was frequently observed. Ovarian abnormalities, such as reduced ovarian reserve and ovarian cysts, were also noted. **Results**: A significant correlation was found between elevated BMI and ovulatory dysfunction, underscoring the role of obesity in hormonal imbalance and impaired ovulation. Uterine and unexplained infertility accounted for a smaller proportion of cases. **Conclusion**: The study emphasizes the need for thorough infertility evaluation and highlights the importance of addressing modifiable factors

like obesity. Integrating weight management into infertility care may improve reproductive outcomes, particularly in women with ovulatory disorders. These findings support the implementation of individualized, cause-specific treatment strategies for effective infertility management.

051: Restoring Hope To Heal Hearts Beyond the Silence: : Structured Perinatal Grief Assessment and Compassionate Care Following Intrauterine Fetal Demise

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Background: Intrauterine fetal demise (IUFD) is a profoundly distressing obstetric outcome, affecting approximately 1 in 160 pregnancies worldwide. Beyond the clinical implications, IUFD triggers intense psychological and emotional grief in mothers and families. This study presents a case series managed at a tertiary center, emphasizing the role of comprehensive grief assessment and compassionate care in restoring hope after such loss. **Aim**:We report six cases of IUFD between 25-40 weeks gestation, complicated by conditions including gestational hypertension, chorioamnionitis, intrahepatic cholestasis, hypothyroidism, and gestational diabetes. All patients underwent safe vaginal deliveries with individualized peripartum management. Despite clinical diversity, shared emotional patterns-shock, denial, guilt, and profound grief-were observed. **Methods**: Grief severity was quantified using the Perinatal Grief Scale (PGS), complemented by depressive symptom screening via the Edinburgh Postnatal Depression Scale (EPDS), at baseline and post-intervention.Intervention and Support: A multidisciplinary, trauma-informed approach was implemented, encompassing clear, empathetic communication, and counseling by trained professionals. Postpartum care included contraceptive counseling, spiritual and family support, and scheduled follow-ups. **Results**:Serial assessments demonstrated significant reductions in grief and depressive symptoms, indicating improved coping and psychosocial stabilization. This structured bereavement model fostered resilience, guiding mothers from despair toward hope. **Conclusion**:IUFD is a life-altering event with deep emotional consequences. Integrating systematic grief assessment with compassionate, multidisciplinary care optimizes psychological recovery and honors maternal resilience. Continued research is essential to refine protocols and enhance support for bereaved families.

052:Vein of Galen Aneurysm: a Hidden Cerebral Anomaly

Saumya Varshney, Neeta Singh. SGPGIMS, Lucknow

Background: To claim that vein of Galen aneurysm is a rare entity is an understatement. It's true incidence in antenatal period remains undetermined amidst it's infrequent occurrence. Surprisingly, it contributes to 30% of all intracranial malformations detected in the paediatric population. The logical explanation for this conundrum lies in the fact that it manifests largely in the third trimester. It is a known culprit behind non immune hydrops and high output cardiac failure leading to stillbirth. An obstetrician must be well versed with its occurrence in order to effectively manage the perinatal challenges it poses. **Case**: We present a case series with 16 cases

of cerebral vascular malformations detected in the antenatal periods out of which 7 were identified to be vein of Galen aneurysms. Amongst these seven cases, 2 were identified as early as 20 weeks, which opened the window for discussion of termination of pregnancy in these patients. While two cases presented at late third trimester with features of cardiomegaly. Both these patients were serially monitored. As a result of which, a multidisciplinary approach could be undertaken and appropriate and timely delivery arrangements were made. Two of the fetuses underwent embolization of the aneurysm post delivery, out of which one at 3 year follow up had no developmental delay. **Conclusion**:To conclude, it is important to recognise various early indicators of this anomaly so as to catch it prior to its late manifestations such as hydrops and hydrocephalus. Potential use of fetal MRI and neurosonography can aid in its confirmation, hence awareness amongst obstetricians and sonologists is vital. This shall give an opportunity for surveillance, timely delivery and post natal interventions for reducing perinatal morbidity.

053: Unmasking Rare Genetic Etiologies of Fetal Anemia - SPTA1 Linked Hereditary Spherocytosis

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Background: Fetal anemia, a potentially life-threatening condition,arises from fetal/placental/ maternal pathologies, including immune & non-immune causes- genetic disorders(chromosomal/ monogenic),infections and cardiovascular anomalies. Hereditary spherocytosis (HS) is the most prevalent inherited hemolytic-anemia, typically autosomal-dominant, though rare autosomal-recessive forms can manifest severely,such as hydrops fetalis. HS is genetically heterogeneous, involving mutations in genes encoding RBC-membrane proteins. SPTA1gene mutation can result in elliptocytosis-2, pyropoikilocytosis and HS-type 3. This report presents cases of consanguineous-couples with adverse obstetric histories and fetal anemia.In first case, a male fetus with hydrops at 31 weeks-gestation underwent autopsy.No teratogenic exposure/maternal infection/immune cause was reported. TIFFA revealed no structural malformations(aneuploidy screening not performed).Autopsy findings included neck edema, abdominal distension, hepatomegaly(76.6 g,84th-90th centile), splenomegaly and a structurally normal heart.MLPA(fetal cord-tissue)-no deletion/duplication in subtelomeric region.WES identified a pathogenic heterozygous nonsense-mutation in exon 19 of SPTA1-gene(c.2671C>T; NM_003126.4).Fetal cord blood was unavailable for further hemolytic evaluation. These findings were reiterated during preconceptional counselling of a couple(P1020)with USG records of increased MCAPSV-82.47cm/sec(2.45-MoM)at 26 weeks-gestation.WES confirmed pathogenic SPTA1gene variants in both parents. **Conclusion**: Rare genetic etiologies like autosomal-recessive HS should be evaluated in differential diagnosis of fetal anemia, especially in consanguineous families. De-novo mutations or recessive inheritance account for approximately 25% cases of HS.Early genetic evaluation is essential for accurate prenatal diagnosis and improving outcomes in future pregnancies.

054: Prolonged and Complicated Perinatal Grief Following Stillbirth: a Longitudinal Study

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Background: Perinatal grief is the emotional response of parents to losing a fetus, neonate, or elective termination due to fetal-anomalies. Unlike typical grief, perinatal grief is often prolonged and complicated, with intrusive symptoms like persistent longing or preoccupation with deceased baby and does not follow fixed-stages, instead, manifest in varied patterns as individuals adjust to the loss. **Aim**: This study aims to examine the long-term effects of grief after stillbirth, an area that has not been extensively explored. **Methods**: 147 women from a previous study which validated the Hindi-Perinatal Grief Scale, who experienced still birth in 2019 were reached by phone for prolonged grief assessment. 60 women provided informed consent and completed an online questionnaire. Participants were screened based on ICD-11 criteria for prolonged grief disorder using the PG-13 scale. A paired t-test was employed to assess the change in mean grief scores from baseline to after 5-years. Changes in Generalized Anxiety Disorder (GAD-7) and Patient Health Questionnaire (PHQ) scores were analyzed using the Wilcoxon-signed-rank test. **Results**: The mean (SD) age of the participants was 36.17(5.8) years. The mean (SD) Perinatal grief score of individuals at baseline was 81.9(23.0), and after five years, the mean of prolonged grief was 65.9(24.7). The median (IQR) for GAD-7 at baseline was 2(0.0-5.0) and after five years was 0.0 (0.0-1.7) with a p-value of 0.238, which is not statistically significant. Similarly, the median (IQR) for PHQ-9 scores at baseline was 2.0(1.0-4.0), and now it was 0.0(0.0-2.5) with a p-value of 0.222, which is not statistically significant. **Conclusion**: The study highlights that prolonged grief following stillbirth can persist for a long time. These findings emphasize the need for long-term psychological support and targeted interventions for parents experiencing perinatal grief.

055: Reflections on Stillbirth: Raising Awareness

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Foetal death at ≥20 weeks and/or minimum birth weight >350 gms with no signs of life. Causes are Obstetrical(Placental abruption, multifetal gestation, ruptured membrane at 20-24 weeks), uteroplacental insufficiency, Foetal(structural, chromosomal abnormalities), umbilical cord abnormalities (prolapse, stricture, thrombosis),infections(fetal, Placental), foetal growth restriction, medical complications (diabetes, hypertension/pre-eclampsia, antiphospholipid antibody syndrome, intrahepatic cholestasis of pregnancy). Risk factors are obesity, substance abuse (smoking), post dated pregnancy, advanced maternal age, SLE, autoimmune disease, prior history of stillbirth, chronic renal disease, PPROM , supine posture, SARS CoV2 .Determining the cause of foetal death aids maternal coping, help assuage perceived guilt, permit more accurate counselling regarding recurrence risk. (a) Clinically: foetal weight , HC, CRL,MUAC, Placental weight, (b) Photograph of extremities and palms, frontal plus profile view of whole foetus and face, fetogram (full radiograph of foetus) , Postnatal MRI, radiograph, sonography(if parents decline autopsy), (c) Autopsy, (d) Laboratory evaluation: previously, karyotyping done; now Chromosomal microarray recommended (does not require dividing cells), (e) Pathological examination of

placenta(cord knotting, microvascular abnormalities, infections), cord, chorioamniotic membranes, (f) If karyotyping is only available and death is recent, amniotic fluid can be obtained for amniocentesis. Maternal evaluation is done by history, Maternal Blood (obtained by kleihauer Betke staining) for APLA, S. Glucose, syphilis testing. The method and timing of delivery after a stillbirth depend on the gestational age at which death occurred, maternal Obstetric history and maternal. Misoprostol should be used for induction of labour in IUFD. A woman experiencing a stillbirth or Early miscarriage is at increased risk for depression and posttraumatic stress Disorder and should be closely monitored. Good communication, shared decision making, recognition of parenthood, acknowledging a partner's and families grief, awareness of burials, cremation and funerals , ongoing emotional and practical support. Management of subsequent pregnancy after stillbirth includes (a) Pre pregnancy or initial prenatal visit: evaluation and work up of previous stillbirth, determination of recurrence risk, detailed medical and obstetric history, smoking cessation, weight reduction, genetic counseling, diabetes screen, acquired thrombophilia testing, support and reassurance, (b) First trimester: dating scan, PAPP- A, Beta HCG, nuchal translucency, (c) Second trimester: Level 2 scan, quadruple marker, (d) Third trimester: sonographic screening for foetal growth restriction after 28 weeks every 2-3 weeks , antepartum fetal surveillance testing starting at 32 weeks or 1-2 weeks earlier than previous stillbirth , daily foetal kick counting starting at 28 weeks, NST twice weekly and Biophysical profile twice weekly

056: Determination of Fetal Gestational Age and Fetomaternal Outcome Using Placental Thickness

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Background: Placental thickness (PT) serves as a significant morphological indicator in prenatal development, with alterations in PT frequently linked to various pathological conditions. **Aim**: The present study was planned to determine fetal gestational age and feto-maternal outcome using placental thickness. **Methods**: The objectives of present study were to determine- Fetal gestational age using placental thickness by USG, Feto-maternal outcome based on placental thickness. This was a cross sectional study conducted in the department of Obstetrics and Gynaecology. All subjects who fulfilled inclusion criteria were included. All subjects were analyzed in detail and thorough investigations were carried out. Comprehensive data, including personal, obstetrical, and medical histories, were collected. PT was measured using an ultrasound machine at 22, 34, and 38 weeks of gestation, and these measurements were correlated with gestational age, fetal weight, and APGAR scores post-delivery. Informed consent was obtained. Placental thickness of ANC patients at 22 weeks, 34 weeks & 38 weeks was measured. **Results**: A total of 129 women with singleton pregnancies who agreed to participate were included in the study. Age of the cases ranged from 18 to 35 years. Mean maternal age was 27.38±4.91 years. We found thinner placentas in PIH cases compared to normotensives at all gestational points, thicker placentas in GDM cases at 34 and 38 weeks, thicker placentas in anemic cases at 34 weeks, thinner placentas in intrauterine growth restriction (IUGR) cases at all gestational points and thicker placentas in cases with negative

Rh factor at all gestational points. **Conclusion**: These findings collectively underscore the intricate relationship between maternal health conditions and placental morphology, highlighting the importance of monitoring placental development as a vital predictor of gestational age.

057: Impact of Umbilical Coiling Index on Perinatal Outcomes

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Background: The umbilical coiling index (UCI), defined as the number of complete vascular coils per centimeter of umbilical cord, is a potential marker of fetal well-being. Abnormal coiling patterns—hypocoiling or hypercoiling—have been associated with adverse perinatal outcomes. Despite its clinical importance, UCI remains underutilized in obstetric practice, especially in resource-limited settings. **Aim**: To determine the association between the umbilical coiling index and perinatal outcomes in term singleton pregnancies. **Methods**: A cross-sectional observational study was conducted from 2022–2025. A total of 196 women with singleton, term (37–41 weeks), cephalic pregnancies were enrolled. Immediately after delivery, the umbilical cord was measured for length and total number of vascular coils to calculate UCI. Based on percentile distribution, UCI was categorized as hypocoiled (<0.12), normocoiled (0.12–0.36), or hypercoiled (>0.36). Maternal and fetal outcomes—including mode of delivery, fetal distress, meconium-stained liquor, low Apgar score, NICU admission, intrauterine growth restriction (IUGR), and maternal comorbidities—were analyzed. **Results**: Normocoiled cords were observed in 63.3% of cases, hypocoiled in 14.8%, and hypercoiled in 21.9%. Abnormal UCI (both hypo- and hypercoiled) was significantly associated with adverse perinatal outcomes such as increased rates of fetal distress, low birth weight, meconium-stained liquor, NICU admission, and IUGR. Maternal complications like hypertensive disorders and gestational diabetes were also more prevalent in abnormal coiling groups. Cesarean delivery was more frequent among abnormal UCI cases. **Conclusion**: Abnormal UCI is a significant predictor of adverse perinatal outcomes. Incorporating UCI assessment into routine postnatal evaluation—and potentially antenatal ultrasound protocols—may aid in risk stratification and timely obstetric intervention, ultimately improving perinatal care.

058: Lessons From Loss: Clinical Determinants of Stillborn in High Risk Pregnancies

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Background: Stillbirth continues to pose a major challenge to obstetric care in low-resource settings. Identification of underlying maternal and obstetric risk factors is crucial for prevention and timely intervention. **Aim**: To analyze the clinical, obstetric, and sociodemographic characteristics associated with stillbirths over a six-month period at a tertiary healthcare care center. **Methods**: A retrospective analysis of 204 stillbirth cases recorded between February and July 2025 was conducted. Data were extracted from hospital records, including parity, gestational age, mode of delivery, maternal comorbidities, and presenting complaints. **Results**: Of the 204 cases, it was seen that more primigravidas delivered stillbirth when compared to multigravidas where the most common age lies between 25 to 35 yrs. 58.3% (n=119) had vaginal deliveries,

while 41.7% (n=85) underwent cesarean section. Common indications for cesarean included females with severely compromised systemic circulation (pulmonary edema, CHF, DCMP) ruptured uterus, and placenta previa with active bleeding. Major associated risk factors were severe anemia (15.6%), severe preeclampsia (13.2%), and thrombocytopenia (9.3%)..urban as well as rural cases are almost similar in percentages. **Conclusion**:The study shows that the patterns are not clear but stillbirths are not random, they are rooted in risk. Therefore timely intervention holds the power to reduce the incidences. Each stillbirth has its own cause —of delays, risks, and missed opportunities therefore strengthening antenatal vigilance can transform these silent tragedies into preventable outcomes.

059: Pregnancy In a Patient With Double Chambered Right Ventricle: a Rare Case With Favorable Prognosis

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Background: Double Chambered Right Ventricle (DCRV) is a rare congenital heart defect marked by abnormal muscle bands that split right ventricle into high-pressure proximal chamber and low-pressure distal chamber. This condition is often diagnosed and surgically treated in childhood and is unusual to encounter in adults. The physiological changes in pregnancy can worsen underlying heart issues. The aim is to underscore the importance of considering DCRV in the differential diagnosis of right ventricular outflow tract (RVOT) obstruction or unexplained pulmonary stenosis. **Case**: We discuss the case of 29-year-old woman who presented at six-week pregnancy with symptoms of exertional dyspnea classified NYHA Class II. Physical examination revealed pansystolic murmur in pulmonary area, and echocardiography indicated prominent RVOT obstruction caused by thickened muscular band characteristic of DCRV. Her symptoms gradually worsened and cardiac surgery was planned in second trimester, but patient was not willing and did not report for the same. Serial monitoring detected stage 1 fetal growth restriction. At 37 weeks, lower segment cesarean section (LSCS) alongside intracardiac surgery for infundibular resection under general anesthesia was performed. A live baby weighing 2.0 kg was delivered and received brief care in NICU. Patient had atonic postpartum hemorrhage, necessitating cesarean hysterectomy. The mother recovered well postoperatively and discharged on day six. At follow-up, she was hemodynamically stable, and dyspnea had completely resolved. **Conclusion**: Multidisciplinary and individualized care results in favorable outcomes for both mother and child, even with complex cardiac conditions. The case also stresses importance of preconception counseling and cardiac assessment in women with known or suspected congenital heart disease.

060: Investigating the Factors Contributing to Low Perinatal Autopsy Rates In Lucknow: a Mixed-Methods Study on the Existing Practices of Healthcare Workers and Analysing Behaviours.

Stavya Singh, Ayesha Ahmad, Suman Nishad, CIMSH, Lucknow

Background: A complete perinatal autopsy remains the most comprehensive tool for understanding the cause of stillbirth and plays a critical role in risk assessment and future prognosis. However, in India, the uptake of perinatal autopsies remains low due to multifaceted barriers involving both healthcare providers and patients. **Aim**: This study aimed to evaluate the perceptions and attitudes of healthcare professionals towards perinatal autopsy, identify existing barriers, and analyze factors influencing its acceptance. **Methods**: A semi-structured questionnaire, comprising both open- and close-ended questions, was administered to healthcare workers (HCWs) who provide care to women experiencing stillbirth. The questionnaire assessed factors affecting autopsy requests, the extent of information given to parents, and the attitudes of HCWs towards perinatal autopsies. **Results**: Among the 43 respondents, none had received formal training in counseling or advising women regarding post-mortem evaluations. While 37% had limited knowledge about autopsies, the majority (63%) lacked awareness regarding essential aspects such as procedure details, costs, reporting time, and its prognostic value. Misconceptions, along with religious and financial considerations, contributed to varying degrees of resistance among HCWs. **Conclusion**: Overall, the findings highlight substantial gaps in knowledge, training, and counseling skills related to perinatal autopsies. In practice, discussions around autopsies are often avoided, but qualitative insights suggest that enhancing HCWs' understanding could improve acceptance and utilization of perinatal autopsies.

061:Unveiling the Unknown: Fetal Autopsy as a Key to Understanding Stillbirths

Radhika Chandra, Pankaj Kumar. AIIMS Raebareli

Background:India is the major contributor to the total number of stillbirths worldwide. However, there is paucity of data due to insufficient reporting, lack of societal acceptance for fetal autopsies, less awareness and financial and resource constraints for detailed investigations. Fetal autopsy is an important tool to identify the cause of unexplained stillbirth which would enable timely intervention in the preconceptional and antenatal period. **Methods**:A retrospective review of 60 stillbirths delivered between 2023 and 2025 at a single tertiary care centre was performed. Fourteen cases(23.3%) were analysed for which fetal autopsies were performed after informed consent of parents. The International Classification of Diseases 11 (ICD-11) definition of stillbirth was used. The cause of intrauterine fetal death was explored by correlating the autopsy reports clinically and with placental histopathological examination. **Results**:Ten (71.4%) cases occurred between 26 to 31 years of maternal age. Five (35.7%) were primigravidas. Among multigravidas, 5 (55.5%) had a history of spontaneous abortions and 2 (22.2%) had both previous spontaneous abortions and stillbirths. Eight cases (57.1%) were associated with fetal anomalies, 4 (28.6%) had clinically attributable or maternal causes, while 2 (14.3%) cases could not be assigned to any maternal, fetal or placental pathology, falling in the classification of unexplained stillbirths.

Conclusion:Stillbirth is an important cause for perinatal mortality. The problem can be addressed by counseling parents for fetal investigations including autopsy, identifying causes, and efficient documentation and work up. This dataset is an important contribution to the scientific pool as it provides insight into Indian data on stillbirth.

062: From Loss to Insight:the Role of Genetic Testing In Previous Perinatal Demise

Priyanka Shanker, Sangeeta Yadav. SGPGIMS, Lucknow

Background: Niemann-Pick disease (NPD) is a rare, autosomal recessive lysosomal storage disorder resulting from mutations in the SMPD1 gene (types A and B) or the NPC1/NPC2 genes (type C). This fatal condition often manifests in early childhood, marked by failure to thrive and progressive neurodegeneration. In families at risk, prenatal diagnosis is essential to inform reproductive choices. Molecular genetic testing provides a definitive approach for early diagnosis. **Case:** This report describes the antenatal diagnosis of Niemann-Pick disease type C1/D in a consanguineous couple with a history of neonatal death. Their previous child experienced failure to thrive, multiple hospitalizations, and was diagnosed with a congenital infection. Genetic testing was not performed at that time, and the child died at three months old. The couple's subsequent pregnancy progressed normally until 24 weeks. At 28 weeks, the fetus developed early-onset fetal growth restriction (FGR), oligohydramnios, ascites, and echogenic bowel. After counseling, the couple elected to undergo amniocentesis at 29 weeks. Molecular analysis revealed that the fetus was homozygous for the NPC1 mutation (c.2672T>C), confirming the diagnosis of Niemann-Pick disease type C1/D. The fetus developed intrauterine growth restriction and ascites at 28 weeks and subsequently had intrauterine death at 32 weeks of gestation. The couple received counselling regarding recurrence risk. **Conclusion:** This case underscores the importance of exome testing in couples experiencing unexplained stillbirth or neonatal death. Couples who are carriers of autosomal recessive conditions face a 25% recurrence risk in future pregnancies. Early prenatal diagnosis in subsequent pregnancy enables informed decision-making and access to appropriate reproductive options.

063:True Knot of Umbilical Cord Presenting With Reduced Fetal Movement

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Background: Umbilical cord connects the placenta to the developing fetus and it is vital for transportation of oxygen and nutrients from maternal circulation to fetus and waste products back from fetus to maternal circulation, thus any abnormality in the umbilical cord results in adverse perinatal outcomes. With an incidence of 0.3-2%, a true knot of the umbilical cord is uncommon. **Case**: A 38 year old multigravida (gravida: 4 para:2+1 live:1) with non-severe pre-eclampsia presented at 34 weeks gestation with reduced fetal movements. General and systemic examination was normal. Uterus was relaxed and corresponded to 32 weeks gestation. Admission cardiotocography was reactive. Obstetric ultrasound showed weight on 1st centile. Dopplers showed cerebroplacental ratio of 0.9. Serial CTG showed a rising baseline fetal heart rate which

was concerning, absent accelerations and reduced variability. Decision for delivery by CS was taken, along with the patient. Per operatively, a true knot was present around 10 cms from the umbilical end with blanching proximal to the knot. **Discussion**: It is difficult to diagnose true knot of the umbilical cord in the antenatal period. It is not a requirement for routine obstetric ultrasonography and the diagnosis is merely as a chance observation. Though uncommon, they are a contributor to adverse outcomes such as fetal distress and stillbirth. **Conclusion**: Reduced fetal movements should be considered as a warning sign of fetal compromise in all cases and should be investigated thoroughly for its cause. Clinical awareness, routine obstetric doppler study, adequate fetal monitoring and prompt decision making in patients with risk factors for true cord knot may help to minimize adverse perinatal outcomes in these patients.

064: Not Just Autoimmune: a Genetic Tale Behind Congenital Fetal Heart Block

Saima. SGPGIMS, Lucknow

Background: Congenital heart block (CHB) is a rare fetal arrhythmia most commonly associated with maternal autoimmune antibodies or structural cardiac defects. However, underlying genetic etiologies, particularly skeletal dysplasias, are rarely considered in the differential diagnosis of isolated CHB. **Case**: We report one unusual antenatal cases of recurrent congenital heart block detected on routine fetal echocardiography. Both fetuses had structurally normal hearts and no maternal autoimmune antibodies. Detailed anomaly scans revealed subtle skeletal abnormalities, including flat facial profile . Given these atypical findings, genetic testing was pursued in second pregnancy , which identified pathogenic mutations consistent with skeletal dysplasia — spondylo-metaphyseal dysplasia, sedaghatian type(homozygous/autosomal recessive). These findings explained the cardiac and skeletal manifestations and indicated a uniformly poor prognosis.Couple opted for medical termination following genetic counseling. **Conclusion**: These cases underscore the importance of considering skeletal dysplasias in the differential diagnosis of fetal CHB, especially in the absence of autoimmune or structural cardiac anomalies. Integration of detailed fetal imaging with genetic evaluation can aid in timely diagnosis and comprehensive parental counseling.

065: Bereavement Care After Stillbirth in Uttar Pradesh: a Qualitative Analysis of the Present Situation, Challenges, and Solutions

*Himanshu Arora**, Ayesha Ahmad**, Suman Nishad**. *ELMCH, **CIMSH, Lucknow*

Background: Bereavement care plays a crucial role in reducing the stress response in mothers who experience stillbirth. However, in India, the delivery of such care remains unregulated, inconsistent, and lacks clear protocols and standards. The significant unmet need for bereavement care leads to dissatisfaction among both grieving mothers and caregivers. **Aim**: This study was conducted to assess existing bereavement care practices following stillbirth, identify the challenges faced by healthcare providers, and suggest possible solutions. **Methods**: The present study is a qualitative analysis using the medium of in-depth interviews. We used a semi-structured, validated

questionnaire and audio-video recording of the interviews. The questions pertained to the existing practices, awareness, challenges faced by healthcare providers and suggestions for improvement at micro- and macro- level. **Results**: Using purposive sampling, we conducted 31 in-depth interviews of doctors and nursing staff involved in caring for women with stillbirth. Most of the subjects demonstrated lack of bereavement care awareness, discomfort in caring due to professional inexperience and absence of training. There is no provision for care and counselling of healthcare providers who themselves undergo psychological trauma and mental stress when caring for such women. **Conclusion**: Bereavement care after stillbirth is in its primitive stages in most of the care settings in India. Increasing awareness about stillbirth and bereavement care, making guidelines, conducting mandatory training for healthcare providers and introducing 'Bereavement companionship' model as a pilot project, can provide initial steps towards betterment in care

066: Solitary Fetal Ascites: a Case Report Highlighting the Importance of Early Detection and Multidisciplinary Follow-Up

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Background: Isolated fetal ascites is a rare antenatal finding characterized by the accumulation of free fluid in the fetal peritoneal cavity without associated hydrops or systemic involvement. We present a case of a 28-year-old primigravida referred at 26 weeks of gestation following detection of fetal abdominal distension on routine anomaly scan. Targeted ultrasound revealed isolated ascites with normal biometry, intact abdominal wall, and no evidence of hydrops, organomegaly, or structural anomalies. Detailed fetal echocardiography and TORCH screening were normal. The karyotype and aneuploidy screening were low-risk, and no maternal infections or alloimmunization were identified. The patient was closely monitored with serial ultrasounds. Remarkably, by 32 weeks of gestation, the ascites had spontaneously resolved without intervention. The remainder of the pregnancy was uneventful, and the baby was delivered at term with good APGAR scores. However, during neonatal follow-up, the infant developed signs of abdominal distension and vomiting at two weeks of age. Imaging revealed small bowel obstruction, and exploratory laparotomy confirmed congenital intestinal mal-rotation with midgut volvulus, necessitating surgical correction. **Conclusion**: This case highlights the importance of vigilant monitoring even in seemingly benign presentations of isolated fetal ascites. Though the antenatal course may appear reassuring with spontaneous resolution, an underlying gastrointestinal etiology may manifest postnatally, requiring prompt diagnosis and intervention. Early detection and multidisciplinary coordination between obstetrics, neonatology, radiology, and pediatric surgery can optimize outcomes. Isolated fetal ascites warrants careful consideration, and resolution before delivery does not preclude the need for continued clinical vigilance.

067: Obstetric Cholestasis In First Trimester

Raish Vagadiya, Ayesha Ahmad, Suman Nishad. CIMSH, Lucknow

Background: Obstetric cholestasis (OC) typically presents in the third trimester, with pruritus, elevated liver enzymes, and raised total serum bile acids (TSBA). First-trimester onset is rare and poses diagnostic and management challenges due to limited guidelines. **Case**: A 26-year-old woman presented at 12 weeks gestation with severe pruritus and vomiting. She had a previous history of OC in her prior pregnancy. Investigations showed raised liver enzymes and significantly elevated TSBA. Initial treatment with ursodeoxycholic acid (UDCA) and cholestyramine failed to provide relief. On hepatologist advice, rifampicin was added, resulting in dramatic improvement in symptoms and bile acid levels. The patient remained stable until 31+4 weeks, when symptoms recurred. Due to rising TSBA and maternal discomfort, labour was induced after steroid coverage. A 1.68 kg female baby was delivered at 32 weeks and discharged from NICU after 3 weeks. Maternal liver function normalized postpartum. **Conclusion**:This case highlights a rare first-trimester presentation of OC, unresponsive to standard treatment. Rifampicin proved beneficial in refractory OC. Early recognition and individualized therapy are crucial, even in early gestation. Clinicians should consider OC in differential diagnoses of early pregnancy pruritus, and explore advanced options when first-line therapies fail.

068:Navigating High-Risk Pregnancies: Uterine Preservation in a Complex Second Trimester Cesarean Scar Pregnancy With Placenta Percreta

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Background: Cesarean scar pregnancy (CSP) is a rare but potentially fatal condition, occurring in about 1 in 1,800 to 2,500 pregnancies. When associated with placenta percreta, there is a significantly heightened risk of severe hemorrhage and uterine rupture, especially during the second trimester. Although hysterectomy has been the traditional management, uterine preservation remains uncommon. This case demonstrates a rare successful conservative surgical approach in such a high-risk situation. **Case**: A 23-year-old woman, gravida 2 para 1, with a prior cesarean delivery, was referred at 15 weeks' gestation for evaluation of CSP complicated by placenta percreta. Ultrasound and MRI confirmed implantation of the gestational sac in the lower uterine segment with deep myometrial invasion. She underwent surgical excision of the scar pregnancy and segmental myometrial resection, successfully preserving the uterus. The surgery was complicated by massive intraoperative hemorrhage, requiring blood transfusion and ICU admission. Despite these complications, her postoperative course was stable and uneventful. The incidence of CSP with placenta percreta is rising with increasing cesarean rates. Early detection through advanced imaging is essential for appropriate planning. While hysterectomy was once standard, fertility-sparing surgeries are gaining acceptance. A multidisciplinary approach is critical to optimize maternal outcomes in such complex cases. **Conclusion**: CSP complicated by placenta percreta is a rare, high-risk obstetric condition with considerable morbidity. Early and accurate

diagnosis is crucial. This case exemplifies that with careful surgical and multidisciplinary management, uterine preservation is achievable, allowing potential future fertility

069: First Prenatal Diagnosis of Familial Hemophagocytic Lymphohistiocytosis (FHL) With Novel PRF1 Mutation in a Fetus Presenting With Hydrops and Fetal Anemia

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A 30-week primigravida was referred to our center with ultrasound findings of hydrops fetalis and raised middle cerebral artery peak systolic velocity (MCA-PSV), suggestive of fetal anemia. No structural anomalies were detected. The patient was evaluated with TORCH PCR, parvovirus B19 PCR, and indirect Coombs test, all of which were negative. Follow-up ultrasound after two weeks showed progression of hydrops, and intrauterine fetal demise (IUFD) occurred one week later. Whole exome sequencing (WES) performed on amniotic fluid revealed a homozygous pathogenic PRF1 variant (c.386G>C; p.Trp129Ser). This variant is being reported for the first time prenatally, though it has previously been associated postnatally with familial hemophagocytic lymphohistiocytosis type 2 (FHL2), an autosomal recessive immune dysregulation disorder. FHL presenting as nonimmune hydrops has been rarely documented in literature (Rajasekaran et al., 2004; Vermeulen et al., 2009; Xu et al., 2021; Wada et al., 2021). This case highlights the importance of WES in evaluating unexplained NIHF with fetal anemia, particularly when conventional investigations are inconclusive. Early genetic diagnosis enables accurate counseling, family risk assessment, and guidance for future pregnancies.

070: Prenatal Diagnosis of Cockayne Syndrome Type B In a Pregnancy With Previous Autism History: a Rare Case Report

Priya Garhwal. TS Mishra Medical College, Lucknow

Background: Cockayne syndrome (CS) is a rare autosomal recessive disorder caused by mutations in the ERCC6 or ERCC8 genes, leading to defective DNA repair. Prenatal diagnosis of CS is uncommon, particularly when identified incidentally through exome sequencing. This case presents a rare overlap of screen-positive Down syndrome, confirmed Cockayne syndrome mutation, and a strong family history of autism. **Case**: G2P1L1A0 woman with a history of lower segment cesarean section and a previous child diagnosed with autism, presented at 11 weeks + 5 days of gestation for routine antenatal care. NT scan revealed a live singleton fetus with normal nuchal translucency (1.1 mm), nasal bone present, and normal uterine artery Doppler. Dual marker screening indicated an increased risk of Trisomy 21 (1:162). Whole Exome Sequencing (WES) was performed due to the family history, revealing a homozygous pathogenic variant in ERCC6 gene [c.3776C>G], associated with Cockayne Syndrome Type B. Notably, the previously affected child was heterozygous for the same variant. FISH analysis ruled out Trisomy 21, 13, and 18. **Conclusion**: This case represents a rare prenatal diagnostic challenge where overlapping genetic risks led to identification of a severe monogenic disorder (CS) alongside screen-positive Down syndrome. It

underscores the importance of comprehensive genetic evaluation, especially in families with neuro-developmental disorders, and highlights the evolving role of WES in f e t a l m e d i c i n e .

071: Harlequin Ichthyosis: A Case Report with Implications for Carrier Screening and Reproductive Planning

Namita Doharey, Neetu Singh. Dr. RMLIMS, Lucknow

Background: Harlequin ichthyosis (HI) is a rare, autosomal recessive disorder with incidence of 1 in 300,000 live births worldwide. It is characterized by thick, plate-like hyperkeratotic skin, severe facial malformations, and high neonatal morbidity and mortality. Consanguinity further elevates the risk of carrier couples. Here, we report a preterm male neonate with classical HI features born via emergency lower segment Ceasarean section to an unbooked, consanguineous G2P1L0 mother with previous stillbirth and prior LSCS, emphasizing the importance of early genetic counselling and prenatal screening. **Case**: A 26-year-old G2P1L0 woman at 36 weeks gestation, with second-degree consanguinity and a prior stillbirth, presented in labor with fetal distress. She had not undergone prenatal investigations or anomaly scanning. After counselling on potential congenital anomalies, an emergency LSCS was performed, delivering a male infant weighing 2.6 kg with Apgar scores of 3 and 4 at one and five minutes, respectively. Clinical examination revealed hallmark HI manifestations: thick, armor-like hyperkeratotic plates separated by deep fissures distorting eyelids, nose, mouth, and ears, and restricting limb movement. The neonate was immediately transferred to the pediatric team for supportive neonatal care. **Conclusion**: This case underscores the critical need for pre-conceptional carrier screening and early prenatal diagnosis in high-risk pregnancies like previous stillbirth, particularly among consanguineous couple. Early recognition and timely counselling may guide reproductive choices and facilitate early interventions.

072: Unbooked and Unheard: Eclampsia In a Resource-Limited Setting: Delays, Deficiencies, and a Lost Neonate

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Background: Eclampsia continues to be a major cause of maternal and perinatal morbidity and mortality in low-resource settings. Antenatal eclampsia, though preventable, still occurs in rural India due to limited access to quality antenatal care, delayed recognition of complications, and deeply rooted socio-cultural barriers. **Case**: A 25-year-old unbooked primigravida at 38 weeks gestation presented with 12 convulsions over 14 hours. She had received minimal antenatal care and no timely medical intervention due to superstitious beliefs, poor transport access, and absence of trained personnel at local sub-centres. On admission, she was hypertensive, semiconscious, and in poor condition. Management included intravenous magnesium sulfate, antihypertensives, and emergency caesarean section for fetal distress. A 2.575 kg female infant was delivered with poor Apgar scores, developed hypoxic-ischemic encephalopathy stage III, and succumbed within 24 hours. The mother required ICU care but recovered postoperatively. **Conclusion**: This case reflects systemic gaps in rural maternal care: inadequate awareness, lack of

emergency preparedness at peripheral health centres, and poor implementation of existing health schemes. Addressing these barriers through education, infrastructure strengthening, and reliable transport systems is essential to prevent avoidable maternal and neonatal deaths in rural India.

073:Monogenic Origins of Multisystem Fetal Malformations Leading to Stillbirth: a Retrospective Case Series

Sukriti Sharma, Monali, Neeta Singh, Sangeeta Yadav, Mandakini Pradhan. SGPGIMS, Lucknow

Background: Lethal fetal anomalies are a major contributor to stillbirth and present significant diagnostic and counseling challenges, particularly when multiple organ systems are involved. While chromosomal abnormalities are commonly implicated, monogenic disorders are increasingly recognized as underlying causes. **Aim**: This study evaluates the spectrum of fetal malformations associated with single-gene disorders in patients with a history of stillbirth. **Methods**: We conducted a retrospective analysis of 269 pregnant patients with prior stillbirths who presented during a subsequent pregnancy over a 3-year period. All underwent detailed ultrasonography , revealing fetal malformations in 84 cases. **Results**: Invasive prenatal testing was offered to all 84; 73 patients accepted, and 11 declined. Among the 73 tested,23 cases (31.5%) were diagnosed with single-gene disorders,9(12%) cases had chromosomal abnormalities,41(56%) cases showed no identifiable genetic abnormality.Of the 23 monogenic cases, 16 had a history of recurrent stillbirth, and 7 had non-recurrent events. The affected fetuses exhibited diverse anomalies, including renal malformations, skeletal dysplasias, non-immune hydrops fetalis, and cardiac defects. Parental genetic testing confirmed inheritance patterns and facilitated recurrence risk assessment. **Conclusion**: Monogenic disorders are the hidden culprits behind many lethal fetal anomalies—often overlooked, yet profoundly recurrent. By pairing high-resolution prenatal imaging with precision genetic diagnostics, we unlock the potential to transform uncertainty into clarity. Early detection not only empowers families with answers but also reshapes the trajectory of future pregnancies. It's time to bring monogenic disorders to the forefront of stillbirth prevention and redefine how we counsel, care, and prepare.

074: Acardiac Twin - a Rare Presentation of TRAP Sequence.

Anuradha. UPUMS, Saifai

Background:Twin Reversed Arterial Perfusion (TRAP) sequence is a rare and serious complication seen in monochorionic twin pregnancies, where one twin (acardiac twin) lacks a functional heart and is perfused retrogradely by the co-twin (pump twin) via abnormal placental vascular connections. The condition poses a significant risk of heart failure and perinatal mortality for the pump twin. **Case**: A 30-year-old G2P1001 at 29 weeks of gestation with preterm labour pain presented in Emergency Labour Room at UPUMS Saifai Hospital. Her one month back ultrasound report revealed a monochorionic diamniotic twin pregnancy. Twin A appeared structurally normal with normal cardiac activity and biometry consistent with gestational age. Twin B demonstrated grossly abnormal morphology—absence of cephalic structures, poorly developed trunk and limbs,

and no detectable cardiac activity. Color Doppler imaging confirmed reversed arterial flow in Twin B, consistent with TRAP sequence. Polyhydramnios was noted in the amniotic sac of the pump twin. Patient went into active labour and deliverd Twin A (Morphological normal with weight 1130 gms) And Twin B (Acardiac with weight 350 gms.) **Conclusion**: Early diagnosis of TRAP sequence using ultrasound and Doppler is crucial for fetal outcome. Timely fetal intervention, such as cord occlusion, can significantly improve the survival rate of the pump twin.

075: Cesarean Myomectomy Case Report

Harshita Mishra, Ekta Chaudhary. ELMCH, Lucknow

Uterine fibroids are common benign tumors encountered during pregnancy, posing significant challenges when associated with cesarean delivery. Traditionally avoided due to the risk of hemorrhage, myomectomy during cesarean section is gaining acceptance with improved surgical techniques and patient selection. We present a case of a 40-year-old G3P0A2 woman at 34+2 weeks gestation with twin pregnancy and a large anterior wall fibroid, who underwent an emergency lower segment cesarean section (LSCS) with concurrent myomectomy. A fibroid measuring 10×12 cm was successfully enucleated under spinal anesthesia. The procedure was uneventful with manageable blood loss and a good postoperative recovery. This case demonstrates that cesarean myomectomy, when carefully planned and executed, can be a safe and effective option, especially in symptomatic patients, and may eliminate the need for future surgeries.

Reflections

Once she was holding mine
And today I am
Her hand as strong as before
The tremble is mine or her
The steps slower than before
I matched with one at a time
The discussion more
practical
We had in previous days

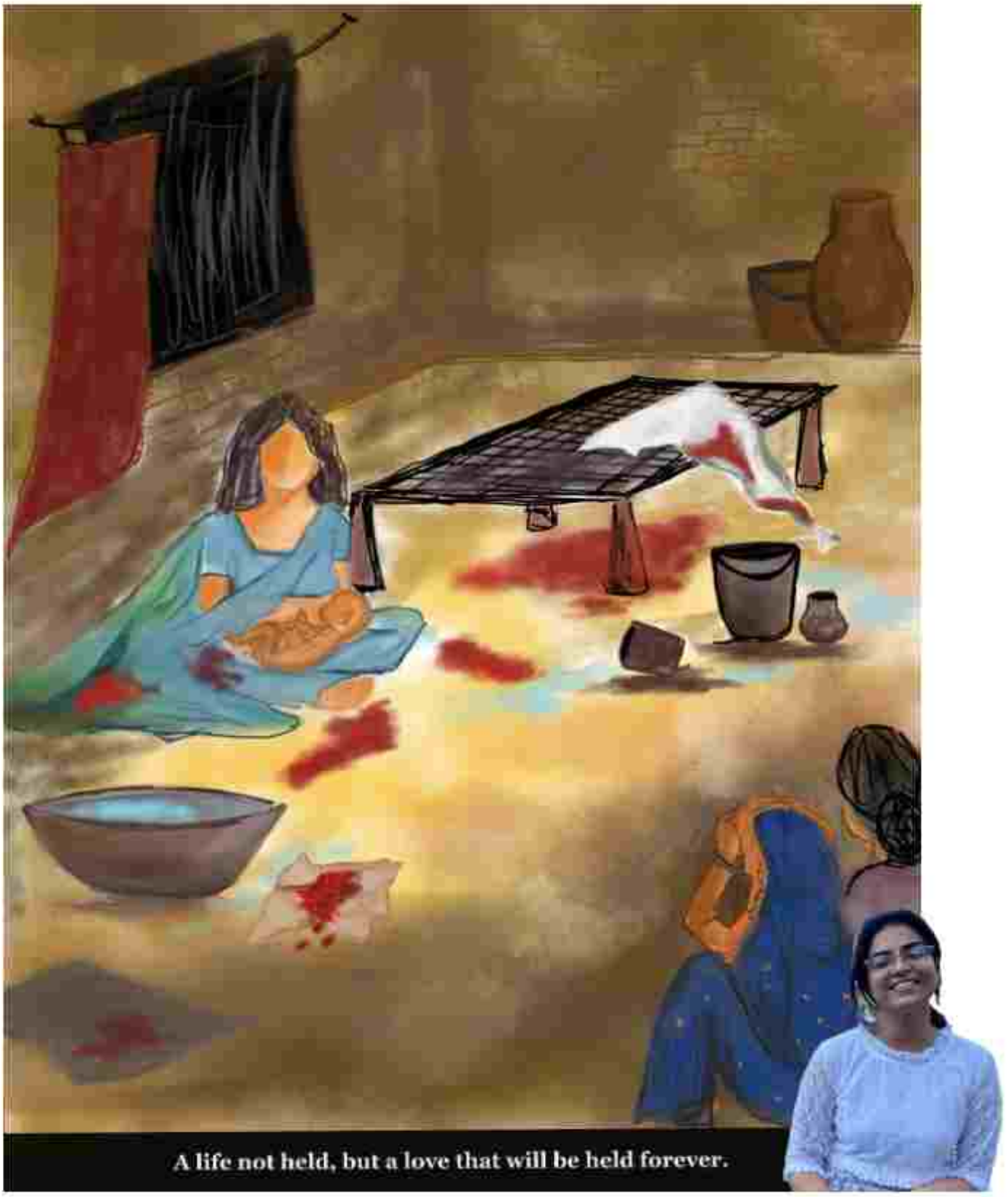
The days she taught to hold
A needle holder or a forceps
The scolding and appreciation
That sharpened the senses
The brain sharper than before
I bow before her
Give my hand to be hold
My madam I am what I am today

Dr. Mandakini Pradhan

STILLBIRTH... is one of the most painful realities of obstetrics, where medical science meets profound human grief. In such moments, honest communication, respectful language, and compassionate care matter as much as clinical skills. The quality of bereavement support leaves a lifelong impact—families may never forget the kindness, presence, and dignity they receive in their sorrow. As doctors, beyond managing risks and protocols, our true duty lies in ensuring that even in loss, parents feel cared for, respected, and never alone.

Dr. Shalfali Singh
SR, Obgyn, LLRM, Meerut

Dr. Anshu Choudhary
Junior Resident, Obgyn, QMH, KGMU, Lucknow



Dr. Garvita Gulati
Junior Resident Obgyn
AIIMS Rishikesh

"बिन साँसों की किलकारी"

कोख में जब आहट आई,
घर भर में ख़ुशियाँ छाई।
हर दिन था इक त्यौहार,
हर पल बस उसका इंतज़ार।

माँ ने लोरी बुन डाली,
पापा ने ख़्वाबों की थाली।
नाम रखा, कपड़े लाए,
झूला तक भी बंधवाए।

हर सुबह वो पेट सहलाती,
धीरे-धीरे बातें बतलाती।
"बेटा हो या बेटी प्यारी,
बस हो उसकी मुस्कान हमारी।"

फिर वो दिन भी आ गया पास,
जिस दिन थी सबको बस एक आस।
मगर जो आया, वो बोला नहीं,
उसने पहली साँस भी लिया नहीं।

न धड़कन थी, न कोई साज़,
बस आँखों में था सूनापन आज।
झूला रह गया बिल्कुल खाली,
सपनों की छाया हो गई काली।

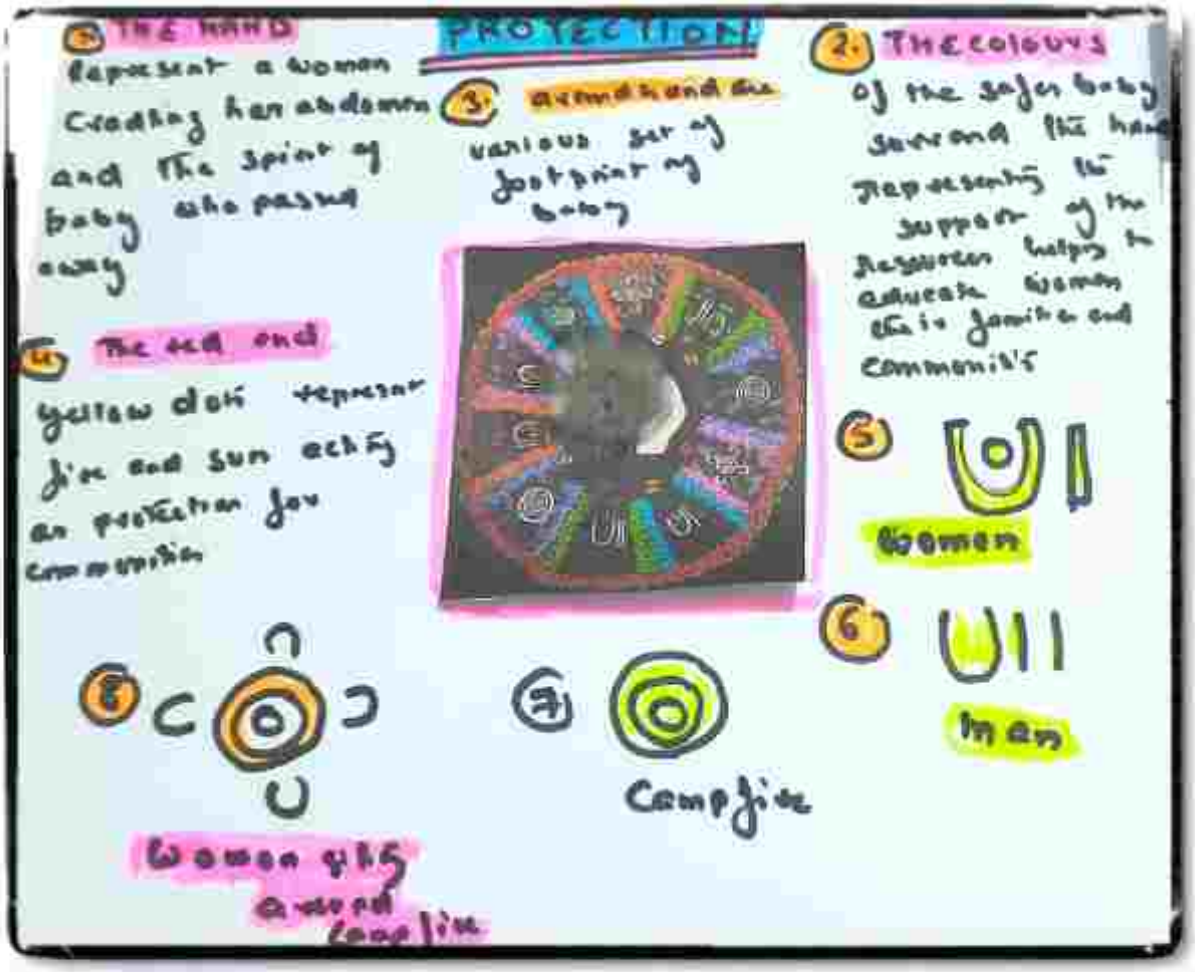
माँ की गोद, पापा की बाहें,
सब रह गईं अधूरी राहें।
किलकारी जो गूंजती चारों ओर,
बन गई अब एक मूक शोर।

फिर डॉक्टर ने बात बताई,
सच की चादर सामने लाई।
"ये Still Birth है, समझो इसे,
और आगे से बचो इससे।

जाँच कराओ, रखो ख्याल,
सेहत हो तो सब बेहाल टाल।
ख़ुराक, आराम, समय की पहचान,
बचा सकते हैं ये अनजान नुकसान।"

हाँ, जो गया, वो लौटेगा नहीं,
पर उम्मीद कभी भी टूटे नहीं।
फिर इक दिन झूला हँसेगा,
माँ का आँचल फिर से बसेगा

Dr Pooja
Junior Resident Obgyn
AIIMS Rishikesh



Two hands...protection
Red and yellow dots...and symbol of women and man to show the feeling of loss for mother and father of a stillborn

Dr. Anchal Gupta
MBBS, DGO
Consultant Obgyn, Veerangna Avanti Bai, Lucknow

Dr. Surheeta Kareem

MS, FICMCH, FIAGES

Consultant Obgyn, Star Hospital Pvt. Ltd. & Safe Test-tube Baby Centre, Gorakhpur

Dr Jumana Zehra
JR, Obgyn, QMH, KGMU, Lucknow

For those who were
not born leave a burden
to the born
Of desolation, despair &
remorse
A memory of pending memoirs
...

अंधेरे के पार एक उजाला

गोद में आने से पहले ही,
तू मेरी बाहों से छूट गया।
सांसों की पहली लय सुने बिना,
मौन की गहराइयों में डूब गया।

सजाया था कल्पना में मैंने,
लोरियों गुनगुनाई थीं।
छोटे कदमों की आहट पर,
हजारों उम्मीदें बुन लाई थीं।

एक झटके ने ऐसी रेखा खिंची,
कि आँचल खाली रह गया।
ममता की नदिया उमड़ पड़ी,
पर सावन सूखा रह गया।

समय यह घाव अवश्य भरेगा,
मेरा दर्द मेरी ताकत बनेगा।
मेरी ममता फिर से खिलेगी
फिर नया सूरज फिर से उगेगा।

डॉ. मोना आसनानी

Dr Mona Asnani
Additional Professor, Obgyn,
KGMU, Lucknow

Dr Khushi Dhankhar
MBBS, CIMSH,
Lucknow

अनसुनी किलकारियाँ

खुशी की एक लहर सी गूंजी थी 9 महीने पहले
जब पता चला था कोई आने वाला है,
जिसके लिए एक माँ हर दुख सह ले !
एक नई किरण ,एक नई उम्मीद,एक नया एहसास था वो, मैं माँ बनने वाली हूँ ?
सच या झूठ का तो पता नहीं ,मगर लम्हा बहुत खाश था वो !
ना जाने कहाँ से आ गया एक तूफ़ान
तोड़ के रख दिया मेरे सारे उमींदो का मकान !
तू नहीं है अब इस दुनिया में,इस बात से थी मैं अंजान,
हँस के पूछा था मैंने तो, जल्दी से गोद में दे दो,कहाँ है मेरी जान?

Dr. Khushl Raj
MBBS, CIMSH, Lucknow

I talk a lot. I write a lot too.
But, for once I had no words.
As I handed her the lifeless body of her newborn, and she signed the papers, we both went through the motions like robots.

A baby girl, 3kg All wrapped up for now. So still, she could be asleep. But she wasn't. Her skin cold, her heart silent.

The patient looked ..broken. The light in her eyes gone. I had known her for 6 months, met her countless times. Seen the bright, young woman she was. Today that woman was gone.
I had counselled her, consoled her,
but in this moment, I ran out of words.
It is frowned upon, to show emotion, in our field. And so, much was left unsaid between us.
Her hopes shattered, the new crib at home, empty and my own heart heavy.

It is never easy, a stillborn. It breaks everyone who sees it.
They say, the smallest coffins are the heaviest. I believe them .

Dr. Tuhina Gupta
MS, FMAS, DMAS
Asst. Prof. Obgyn, SGT Medical College, Gurgaon

फूल

सब कहते हैं मैं जिया नहीं
अरे, जिया नहीं तो क्या ?
खून तो तेरा ही था ना मुझमें माँ

तेरा सुंदर चेहरा देख न पाया

एक जीवन था मेरा तुझसे उधार लिया हुआ
नौ महीने की वो धड़कने
और तेरी साँसों से जुड़ा हुआ
हर वो लमहा याद रहेगा मुझे माँ

घटा कुछ यूँ
कि तेरे बनाए उस फूल का दबाव सह ना सका मैं माँ
मैं चाहता था इस सुंदर दुनिया मे तुझ संग कुछ पल और बिता सकूँ
माँ कह कर प्यार से तुझे कुछ पल निहार सकूँ
ये ख्वाहिशें सब अधूरी रह गई माँ
मगर,
रुक ज़रा, थोड़ा इंतज़ार कर
मेरे भाई बहन आते ही होंगे माँ
तेरी झोली खुशियों से भरना
भगवन भी चाहते होंगे माँ
उदास न होना तू कि ये जीवन अभी बाकी है
मेरे भाई बहन आते ही होंगे माँ ,
तेरी झोली खुशियों से भरना भगवन भी चाहते होंगे माँ॥

Dr. Sneha Manchanda
Senior Resident Obgyn, Chittranjan Seva Sadan, College of Obstetrics Gynaecology and Child Health, Kolkata

Monisha Jayaprakash

3rd National Annual Conference of Stillbirth Society of India

SBSICON 2025

Theme: Pathways to Prevention – Learning from Loss

SCIENTIFIC PROGRAMME

Dates : August 29 – 31, 2025 | Venue : Lecture Theatre Complex SGPGIMS, Lucknow

30th August 2025, Saturday - C.V. Raman Auditorium

08.00 am to 09.00 am Oral presentations in C.V.Raman Auditorium

Time	Topic	Speaker/ Moderator	Panelists	Experts
Session 1	HALL INCHARGES: Dr Saumya Varshney & Dr Priyanka Shanker			
09.00 am to 09.50 am	**Panel Discussion :** Experiences and challenges in finding the real numbers	Dr Shobha Gudi Dr Smriti Agarwal	Dr Tamkin Khan Dr Bharti Sharma Dr Shalini Singh	Dr Neelam Agarwal Dr Shivaprasad Goudar
09.50 am to 10.40 am	**Panel Discussion :** Preventing Intrapartum Stillbirths- Learn from experts	Dr Bharti Maheshwari Dr Shashi L Kabra	Dr Mitra Saxena Dr Sangeeta Gupta Dr Kavita M Bhatti Dr Sumitra Bachani	Dr Saroj Singh
10.40 am to 11.10 am	**Key Note Address :** Chairpersons: Dr Reva Tripathi, Dr Saroj Singh, Dr Yashodhara Pradeep, Dr Shikha Seth			
	Understanding Stillbirth: Statistics, Global trends & success stories	Dr Rakhi Dandona		
TEA AND COFFEE BREAK				**20 min**
Session 2	HALL INCHARGES: Dr Rohit M Kamagouda & Dr Sukriti Sharma			
11.30 am to 12.30 pm	**UNICEF Session** Chairpersons: Dr Neelam Agarwal, Dr Mandakini Pradhan Accelerating Action to Prevent Stillbirths: Technical Innovations and Policy Pathways	**Moderator:** Dr Vijay Agarwal, UNICEF **Presenters:** 1. Dr Milind Wardhan, NHM 2. Dr Tamkin Khan, Aligarh	Dr Bhaskar Pal, President Elect, FOGSI Dr Shivaprasad Goudar Dr Anjoo Agarwal Dr Ravi Dixit, NHM, UP Dr Kanupriya Singhal, UNICEF, UP	
12.30 pm to 01.00 pm	**Keynote Address :** Chairpersons: Dr Uma Singh, Dr Manju Puri, Dr Shobha Gudi, Dr Amita Pandey			
	Dopplers in the prevention of Stillbirth	Dr Asha Rijhsinghani		
01.00 pm to 01.10 pm	Summarise key takeaways from the session and open floor for audience questions	Dr Naini Tandon Dr Asna Ashraf		
LUNCH BREAK				**50 min**
Session 3	HALL INCHARGES: Dr Kritika Agnihotri & Dr Varsha Rehman			
02.00 pm to 02.45 pm	**Case Discussion with experts:** Preventing Stillbirth Cases	Moderator: Dr Sangeeta Gupta		Dr Asha Rijhsinghani Dr Renu Singh Dr Harpreet Kaur Sidhu
02.45 pm to 03.15 pm	**Keynote Address:** Chairpersons: Dr Vinita Das, Dr Bhaskar Pal, Dr Reena Srivastava, Dr Anita Kaul			
	Back to the Future: Reducing harm by re-inventing intrapartum care	Dr Edwin Chandraharan		
	Chairpersons: Dr Neelam Aggarwal, Dr Mitra Saxena, Dr Sunita Chandra, Dr Kavita M Bhatti			
03.15 pm to 03.30 pm	Preventing Stillbirth - Safe Baby Bundle	Dr Manju Puri		
03.30 pm to 03.45 pm	Mindfetalness and Management of Reduced Fetal Movements	Dr Sheela Mane		
TEA AND COFFEE BREAK				**15 min**
Session 4	HALL INCHARGES: Dr Devanshi Gupta & Dr Saima			
	Chairpersons: Dr Urmila Singh, Dr S.P. Jaiswar, Dr Tanushree Gupta, Dr Sangeeta Yadav			
04.00 pm to 04.15 pm	Optimising perinatal outcome in Hypertensive Disorders of Pregnancy	Dr Asha Rijhsinghani		
04.15 pm to 04.30 pm	Preventing Stillbirth in Multiple Pregnancy	Dr Shikha Seth		
04.30 pm to 04.55 pm	Debate: Metformin for Failed Medical Nutritional Therapy	Dr Manu Shukla Dr Namrata Kumar	Dr Amita Pandey Dr Sujata Siwatch	

04.55 pm to 05.05 pm	Summarise key takeaways from the session and Open floor for audience questions	Dr Asna Ashraf Dr Naini Tandon		
04.30 pm to 05.30 pm	**Poster Session (outside H.G Khorna Auditorium, Station A, B & C)**			
05.30 pm	**Inauguration**			
7.30 pm onwards: Gala Dinner Lecture Theater Complex				
31st August 2025, Sunday - C.V. Raman Auditorium				
8.00 am to 9.00 am	Oral presentations in C.V. Raman Auditorium, H.G Khorana Auditorium and S.S Agarwal Auditorium			
Session 1	HALL INCHARGES: Dr Varisha Rehman & Dr Devanshi Gupta			
9.00 am to 9.50 am	**Panel Discussion:** Workup of a case of Stillbirth	Dr Anjoo Agarwal Dr Seema Chopra	Dr Aradhana Singh Dr Sujata Siwatch Dr Banashree Nath Dr Pragati Trigunait	Dr Seetha Ramamurthy Dr Anita Rajhouria
	Chairpersons: Dr Manju Shukla, Dr Uma Gupta, Dr Seema Mehrotra, Dr Richa Rathoria			
9.50 am to 10.05 am	Lifestyle factors Impacting Perinatal Outcomes	Dr Achla Batra		
10.05 am to 10.20 am	Recurrent Stillbirth	Dr Charmila Ayyavoo		
10.20 am to 11.10 am	**Panel Discussion:** Innovations in Prenatal screening and Fetal therapy	Dr Mandakini Pradhan Dr Chanchal Singh	Dr Seema Thakur Dr Manisha M.B Dr Latika Chawla Dr Saumya Srivastava	Dr Anita Kaul Dr Shalini Tripathi
TEA AND COFFEE BREAK			**20 min**	
Session 2	HALL INCHARGES: Dr Rashmi Saxena & Dr Kumari Tripti			
	Chairpersons: Dr Charmila Aayvoo, Dr Aarti Srivastava, Dr Sumita Arora, Dr Sumbul Naim			
11.30 am to 11.45 am	Saving Babies in Critically Ill Obstetrics Patients	Dr Uma Pandey		
11.45 am to 12.00 noon	Navigating Cholestasis of Pregnancy: Understanding Risks and Preventing Stillbirth	Dr Reema Bhatt		
	Chairpersons: Dr Indu Tandon, Dr Seetha Ramamurthy, Dr Deepa Kapoor, Dr Asma Nigar			
12.00 noon to 12.15 pm	Malaria Dengue and other emerging infections	Dr Shipra Kunwar		
12.15 pm to 12.30 pm	Rainbow Clinics	Dr Bushra Fatima		
12.30 pm to 12.55 pm	Debate Emperical Heparin for suspected APLA	Dr Pavika Lal (For) Dr Vidisha Khanna (Against)	(8+2) min each + 5 min	Dr Minakshi Rohilla Dr Shikha Singh
12.55 pm to 01.05 pm	Summarise key takeaways from the session and Open floor for audience questions	Dr Ayesha Ahmad Dr Neetika Garg		
01.05 pm to 2.05 pm	**SBSICON Quiz Final Round**			
02.05 pm to 02.30 pm	**Valedictory Function**			

हर गर्भ सुरक्षित, हर जन्म सुरक्षित

RRR

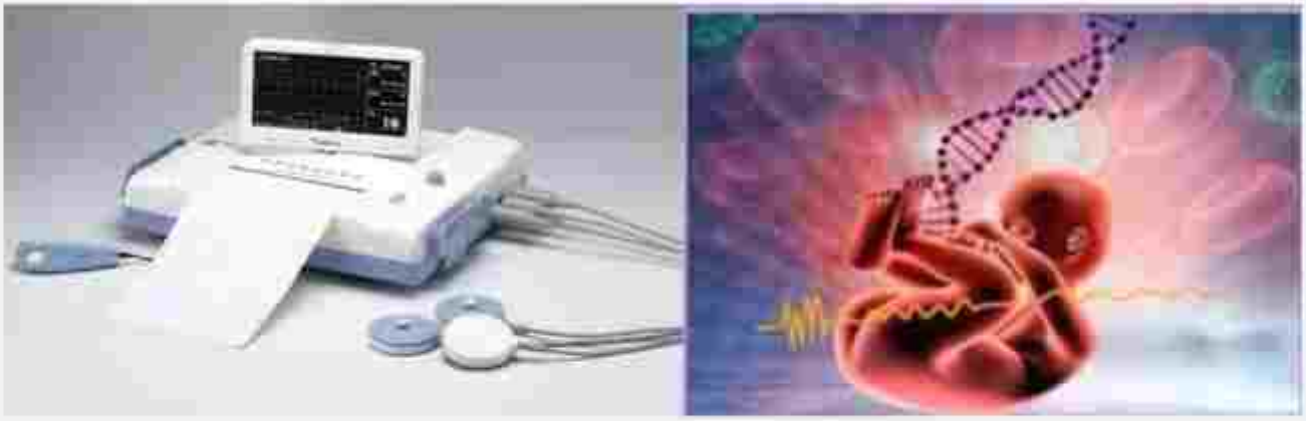
Raising Awareness | Reducing Risk | Restoring Hope

Organised By : Department of Maternal & Reproductive Health

SGPGIMS, Lucknow

CTG Workshop

29th August, 2025 | 8.00 am - 1.00 pm



Masterclass on Optimising Intrapartum Fetal Surveillance: Physiological Interpretation of Cardiotocograph [CTG]

Faculty

Dr. Edwin Chandraharan

3rd National Conference of the Stillbirth Society of India
SBSICON 2025

Venue: HG Khorana Audi., Lecture Theatre Complex SGPGI, Lucknow
Organised By : Department of MRH, SGPGIMS, Lucknow

Bereavement Care Workshop

29th August, 2025 | 2.00 pm - 5.00 pm

"Holding Space for Grief: Honouring Loss with Compassionate Care"

Faculty

Dr. Tamkin Khan

3rd National Conference of the Stillbirth Society of India
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Venue: HG Khorana Audi., Lecture Theatre Complex SGPGI, Lucknow
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3rd National Conference of the Stillbirth Society of India

SBSICON 2025

Ultrasound Workshop

29th August, 2025 | 8.00 am - 01.00 pm

SCAN | UPDATE | SAVE

Register Fast !
Limited Seats, Lasting impact
Only 50 spots available for Master Class

Live Ultrasound Demonstration

The AI Ultrasound Blitz

Master class : Fetal Heart & Brain

Hands on Amniocentesis

Faculty

Dr Ashok Khurana

Dr Mandakini Pradhan

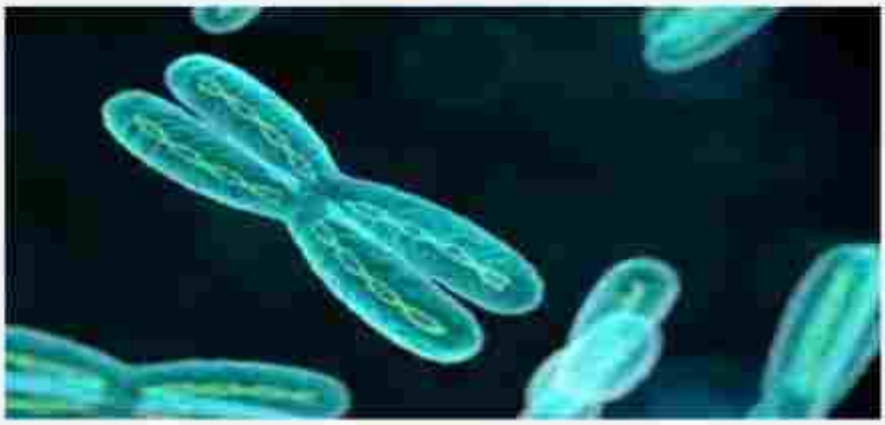
Venue: S.S. Agarwal Auditorium, Lecture Theatre Complex SGPGI, Lucknow

Contact: Dr Neeta Singh-9936407090

Genetics Workshop

Sampling to Interpretation

29th August, 2025 | 2.00 pm - 5.00 pm



**"Cracking the Code:
Understanding Genetics in Stillbirth"**

Faculty

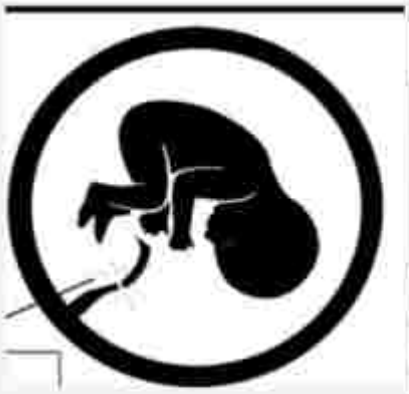
Dr. Mandakini Pradhan

3rd National Conference of the Stillbirth Society of India
SBSICON 2025

Venue: S.S. Agarwal LT, Lecture Theatre Complex SGPGI, Lucknow
Organised By : Department of MRH, SGPGIMS, Lucknow

Perinatal Pathology Workshop

31st August, 2025 | 9.00 am - 1.00 pm



"Uncovering the Cause: Perinatal Pathology in Stillbirth Evaluation"

Faculty

Dr. Sunil Jaiman

3rd National Conference of the Stillbirth Society of India
SBSICON 2025

Venue: HG Khorana Audi., Lecture Theatre Complex SGPGI, Lucknow
Organised By : Department of MRH, SGPGIMS, Lucknow

SBSICON 2025

SGPGIMS, LUCKNOW

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NIPT

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Flow Profiles

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Reduce keystrokes by **64%** over manual Doppler optimization

Spine Trace

Welcome to easy and seamless 3D. Simply trace the spine and the system automatically acquires the volume and displays the coronal view.

Reduces pelvic floor exam time by up to **75%**[1]

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Voluson SF HC Ultrasound System. Made in GE HealthCare Pvt Ltd, at SA-4 Kadugodi Industrial Area, Whitefield, Bangalore, Karnataka, India – 560 067. Warnings, precautions for use and relevant contraindications of product: To use a diagnostic ultrasound machine effectively, ensure it is calibrated and disinfected. Apply conductive gel to the patient's skin and position the probe over the area of interest, adjusting the angle and settings to optimize image quality. Only trained professionals should operate the machine to ensure safe and accurate diagnostics. Also use of Doppler is not recommended in the early 1st trimester/up to 12 weeks of Pregnancy as it increases the thermal index. This material was created and reviewed on 11th September 2024. Additional information can be made available on request.