

THE CLINICAL STUDY OF INTRAUTERINE DEATH OF FETUS

Obstetrics & Gynaecology

**Dr. Medarametla
Hemanjali**

Postgraduate MS, OBGY in GEMS Srikakulam

**Dr. Pandula
Revathi**

Professor and HOD, Department of OBGY GEMS, Srikakulam

ABSTRACT

Background- Intra Uterine Fetal Death (IUFD) is a tragedy not only to the mother but also to the family and the treating obstetrician. The fetal deaths are associated with maternal, placental or fetal complications. **Aims & Objectives:** To identify the risk factors for IUFD like poor socio economic status, teenage pregnancies, medical complications like Anemia, Gestational Hypertension, Gestational Diabetes Mellitus & inadequate health care facilities & Prevention of those factors by providing regular antenatal care and timely intervention. **Materials & Methods:** Retrospective study conducted for a period of 12 months (JAN 2021 to DEC 2021). Study population includes all Intra Uterine Death cases admitted in the department of obs&gyn in our institute. The cases taken for the study are with period of gestation above 28 weeks & weight of fetus above 500 grams, presenting complaints like loss of fetal movements, any leaking or bleeding per vagina & medical disorders, previous obstetric history noted. After delivery details of the fetus, any abnormality in the placenta and cord is noted. **Results:** Parity is an important factor which influences pregnancy outcome. In the present study, majority of the cases were present in primigravida (60%). Similar observation was made by Desai S et al in their study (46.15%). Induction was done 60% cases of which all are delivered vaginally, & remaining 40% cases underwent emergency LSCS indication being CPD. **Conclusion:** The common causative factors for IUFD are Hypertensive disorders of pregnancy, gestational diabetes, infections, Anaemia, Abruption, congenital anomalies of the fetus, previous history of pregnancy loss, unsupervised deliveries, poor socioeconomic status, multiparity etc. Of which most of them are preventable, when diagnosed and managed early. The incidence of IUFD can be decreased by good antenatal care like Early booking, identifying high risk pregnancies by early screening & timely intervention.

KEYWORDS

Intrauterine fetal death, Gestational diabetes mellitus, Lower segment cesarean section, cephalopelvic disproportion

INTRODUCTION

- Intra Uterine Fetal Death (IUFD) is a tragedy not only to the mother but also to the family and the treating obstetrician.
- It has emotional, psychological and social impact on both parents and their families. The fetal deaths are associated with maternal, placental or fetal complications.
- Prevention of IUFD is possible with early booking, adequate antenatal care, early identification of the risk factors and timely intervention.

AIMS & OBJECTIVES

- To identify the associated risk factors like poor socio economic status, teenage pregnancies, medical complications like Anemia, Gestational HTN, GDM & Inadequate health care facilities etc for the cause of IUFD.
- To prevent the above factors by providing regular antenatal care and timely intervention.

MATERIALS & METHODS

- Study design- Retrospective study
- Study period- 12 months (JAN 2021 to DEC 2021)
- Study population -All IUFD cases were admitted in the department of obstetrics and gynaecology of Great Eastern Medical School and Hospital, Ragolu, Srikakulam which is a rural medical college surrounded by tribal population during the study period.
- Study is conducted after taking approval from the Hospital ethics committee.

METHODOLOGY

- All the cases taken for the study are with POG above 28 weeks & weight of fetus above 500 grams.
- In our study we have taken detailed history like Antenatal care, period of gestation, loss of fetal movements & medical disorders like gestational Hypertension, GDM, H/O leaking, bleeding PV, Previous obstetric history like parity, abortions, stillbirth, congenital malformations, neonatal death, preterm delivery, antepartum hemorrhage (APH) or Pregnancy induced hypertension, operative vaginal delivery are noted. Because, these previous factors may play a role in causing present obstetric disaster.
- Assessment of pelvis is done and details of the mode of delivery like vaginal delivery, operative vaginal delivery, LSCS are noted.
- Details of the fetus like fresh death /macerated stillbirth, sex of the

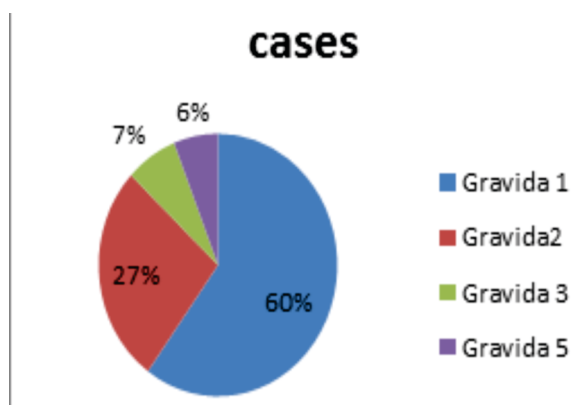
baby weight, any obvious congenital malformations and birth injuries are noted.

- Placenta is examined to note any infarction, calcification, and retroplacental clots, cord abnormalities like knots, number of vessels, cord around neck, and length of the cord are noted.

RESULTS

Table 1- Cases Details Of IUFD

Total cases in study	15
On an average every month	1-2 cases
No. of cases booked in GEMS	1 (6%)
No of cases referred from outside	14 (94%)



Gravida Wise Distribution Of IuFd Cases

Table 2: Cause Wise Distribution Of IUFD Cases

Causes Of IUFD	No Of Cases	Percentage
Pre-eclampsia	5	33%
Eclampsia	1	6%
Ruptured uterus	1	6%
Gestational diabetes	2	13%
Antepartum haemorrhage	3	20%
Cord causes	1	6%
Congenital malformations	1	6%
Meconium stained liquor	3	20%

- Most of the IUFD occurring in the maternal age group of 20-25yrs.
- In our study the IUFD are mostly emergency admissions of which 94% are unbooked cases, which are referred from other hospitals.
- Teenage & elderly age group are mostly unplanned & are at high risk for IUFD. But in our study maximum incidence was found in the age group of 20-25 years of about 73%. Increased maternal age was not a significant factor in our study.
- Parity is an important factor which influences pregnancy outcome. In the present study, majority of the cases were present in primigravida (60%).
- In our study, most of the cases presented with absent fetal movements, some with reduced fetal movements, pain abdomen, leaking or bleeding per vaginum.
- Induction was done 60% cases of which all are delivered vaginally, & remaining 40% cases underwent emergency LSCS indication being CPD
- Based on mode of delivery -60% undergone vaginal deliveries, 40% undergone lscs Among IUFD mostly noted Birthweight is in the range of 1000-1500 kgs.
- Based on gestational age -67% are Preterm deliveries 33% are term deliveries.
- Placental factors like abruption, placenta previa and cord prolapse & placental insufficiency are evaluated.
- As all clinical studies are limited by many factors, including advanced tests, like serum fibrinogen & D-dimers for determination of the case, our study also was limited by the same factors.

DISCUSSION

- Intrauterine fetal death causes distress and psychological trauma to the patients and their family members. The reported incidence of stillbirth from various centers in India is 24.4% to 41.9% which is similar to the incidence noted in our study that is 25.4%. The stillbirth rate in western countries is 4.7% to 12%. The higher rates in our study as compared to western countries could be explained by the fact that ours is a tertiary care institute with rural population, illiteracy, lack of awareness of adequate antenatal care and unsupervised deliveries also contribute to higher stillbirth rate. IUFD rates were higher in high birth order which highlights the importance of family planning.⁽¹⁾
- The IUFD rates were higher in unbooked cases (99%) as compared to booked cases (1%). Al Kadri et al also reported similar evidence in which unbooked women had 70% risk of IUFD.⁽²⁾
- PIH constituted major cause of IUFD accounting upto 33%. Patel S et al reported PIH & eclampsia as cause of IUFD 33.7%. If the condition is untreated and eclampsia develops, the risk of death increase to 5% for the mother and 28% for the baby. This emphasizes the importance of proper antenatal care with screening and prevention of preeclampsia with low dose aspirin. Also early detection and appropriate management of pre eclampsia reduces perinatal mortality and morbidity.⁽³⁾
- Majority of women in our study group delivered vaginally (60%) as compared to Korde et al and Chitra et al.⁽⁴⁾

CONCLUSION

- Not all IUFD are preventable, in some cases IUFD may be idiopathic.
- The common causative factors for IUFD are Hypertensive disorders of pregnancy, gestational diabetes, infections, Anaemia, Abruption, congenital anomalies of the fetus, previous history of pregnancy loss, unsupervised deliveries, rural area, poor socioeconomic status, multiparity etc. Of which most of them are preventable, when diagnosed and managed early.
- The incidence of IUFD can be decreased by good antenatal care like Early booking, identifying high risk pregnancies by early screening & timely intervention.

REFERENCES

1. Korde NV, Gaikwad P. Causes of stillbirth. J Obstet Gynaecol India. 2008;58(4):314-7.
2. Al Kadari, Hanan T, Hani. Factors contributing to intra uterine fetal death. Arch Obstet Gynaecol. 2012;286(5):1109.
3. Patel S, Thaker R, Shah P, Majumder S. Study of causes and complications of intra uterine fetal death (IUFD). Int J Reprod Contracept Obstet Gynecol 2014;3:931-5.
4. Chitra K, Nitin N, Anuradha K, Anil S. Intrauterine fetal death: a prospective study. J Obstet Gynaecol India. 2001;51(5):94-7.