

A Retrospective Study on Ectopic Pregnancy in A Tertiary Care Hospital

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Abstract

Introduction: Ectopic pregnancy is defined as any intra or extra-uterine pregnancy in which the fertilized ovum implants at an aberrant site which is inconducive to its growth and development.¹ It is catastrophic and life threatening condition and one of the commonest acute abdominal emergency in day to day practice affecting approximately 2% of all pregnancies.²

Materials and Methods: This retrospective study was conducted over a period of two years from February 2015 to January 2018 in department Of Obstetrics and Gynecology at MGM Medical College and Hospital, Jamshedpur, India. It is a tertiary care center getting referrals from nearby cities and other hospitals. A total of 29 cases reported during this frame with ectopic pregnancy and were admitted at our hospital through emergency or outpatient department. The diagnosis of ectopic pregnancy was made mainly by history-taking, clinical physical examination, laboratory (urine pregnancy test/serum beta HCG), and radiological (ultrasound) investigations. These cases were traced through the registers kept in casualty, gynecology wards and OT records. The labour room registers were used to determine the total number of deliveries during this period.

Results: In the present study, which was conducted over a period of 3 year, the total number of deliveries was 15160 and the total number of ectopic pregnancies was 29. More than half of the cases (66.25%) had one or the other identifiable risk factor (Table 2). Amongst the various risk factors studied either spontaneous or induced abortion was found in 31.25%. This was followed by a history of previous abdominopelvic surgery (23.75%). Among women who had undergone surgeries 6.55% had tubectomy, 4.91% had previous LSCS and one patient had tuboplasty. History of self-administered MTPill intake was present in 16.39%. Repeat ectopic pregnancies were seen 1.63% of cases. There was no identifiable risk factor in 27.86% of cases.

Conclusion: Ectopic pregnancy is still a major challenge in obstetrical practice because of its bizarre clinical presentation and is one of the commonest causes of pregnancy related deaths in the first trimester. It can be diagnosed early by keeping a high index of suspicion. Despite exhaustive efforts to prevent ectopics the numbers are constantly rising due to increased reporting of the cases and improved diagnostic modalities. Delay in referral causes significant morbidity and diminishes the chances of preserving future fertility. Mass education regarding safe abortion practices and post abortal care should be promoted. Unsupervised usage of MTP pill intake should be condemned.

Key Words: Ectopic pregnancy, morbidity, Mass education.

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I. Introduction

Ectopic pregnancy is defined as any intra or extra-uterine pregnancy in which the fertilized ovum implants at an aberrant site which is inconducive to its growth and development.¹ It is catastrophic and life threatening condition and one of the commonest acute abdominal emergency in day to day practice affecting approximately 2% of all pregnancies.² It is the most important cause of maternal mortality and morbidity in the first trimester.³ An ectopic pregnancy is assuming greater importance because of its increasing incidence and its impact on future fertility.^{4,5} It is a challenge for the obstetricians due to its bizarre clinical presentation. Diagnosis requires a high index of suspicion as the classic triad of amenorrhea, abdominal pain and vaginal bleeding is not seen in all cases. Women may present with non-specific symptoms, unaware of an ongoing pregnancy or may even present with hemodynamic shock. The early diagnosis of this condition over the past two decades has allowed a definitive medical management of unruptured ectopic pregnancy with successful outcomes.^{6,7}

The overall incidence of ectopic pregnancy is increasing in the past three decades but due to early diagnosis and management the case fatality rate has come down. In spite of good diagnostic methods available most women present late as majority of case are asymptomatic till they rupture. Ectopic pregnancy commonly occurs in the fallopian tubes (97%).⁸ Although women with ectopic pregnancy frequently have no identifiable risk factors, a prospective and case controlled study has shown that increase awareness of ectopic pregnancy and knowledge of the associated risk factors like pelvic inflammatory disease, history of previous ectopic pregnancy, tubal sterilization and any previous pelvic or abdominal surgery help in identifying women at higher risk in order to facilitate early and more accurate diagnosis.⁹ Management of the case depends on the clinical presentation, site of the ectopic and need for future reproductive function. Management can be medical as well as surgical.

II. Materials And Methods

This retrospective study was conducted over a period of two years from February 2015 to January 2018 in department Of Obstetrics and Gynecology at MGM Medical College and Hospital, Jamshedpur, India. It is a tertiary care center getting referrals from nearby cities and other hospitals. A total of 29 cases reported during this frame with ectopic pregnancy and were admitted at our hospital through emergency or outpatient department. The diagnosis of ectopic pregnancy was made mainly by history-taking, clinical physical examination, laboratory (urine pregnancy test/serum beta HCG), and radiological (ultrasound) investigations. These cases were traced through the registers kept in casualty, gynecology wards and OT records. The labour room registers were used to determine the total number of deliveries during this period.

The information of each patient was obtained from their case records kept in the medical records department. All the relevant demographic data was analyzed. Records were studied for a period of amenorrhea at the time of diagnosis, presenting complaints like pain abdomen, bleeding per vagina or acute abdomen. Predisposing high risk factors were also analyzed. A documentation of urine pregnancy test done, relevant ultrasound findings were also noted down. Treatment options offered and important intra operative findings were studied. All the information's were entered in a pre-structured proforma. All the data was analyzed by percentage method

Inclusion criteria

All women with confirmed ectopic pregnancies.

Results

In the present study, which was conducted over a period of 3 year, the total number of deliveries was 15160 and the total number of ectopic pregnancies was 29.

Gravida	Number of cases	Percentage
G1	6	21.31
G2	5	18.03
G3	7	26.22
G4≥	11	34.42

Table 1: Distribution of cases according to birth order

Gravida 4 and above accounted for the maximum number of cases. (41.25%) (Table 1). Most of the cases were diagnosed at a gestational age of 6-8 weeks (72.5%).

It was found that the majority of ectopic pregnancies, occurred in the females between age group 25-29 years (43.75%).

High Risk factors	Number of cases	Percentage
Previous Abortion	8	27.86
MT Pill intake	5	16.39
Tubal Ligation	2	6.55
LSCS	2	4.91
PID	1	3.27
Infertility	1	4.91
Previous ectopic pregnancy	1	1.63
Tuboplasty	1	1.63
Ovulation Induction	1	1.63
IUCD	1	3.27
No risk factor identifiable	6	27.86

Table 2: Distribution of cases according to high risk factors

Procedure	No of cases	percentage
Open Salpingectomy	12	42.62
Open Salpingectomy with contralateral tubectomy	10	37.70
Salpingostomy salpingo-oophorectomy	2	6.55
Partial oophorectomy	1	1.63
Medical treatment	1	3.27
Partial salpingectomy	1	1.63
Milking	2	1.63

Table 3: Distribution of cases according to type of surgery done

More than half of the cases (66.25%) had one or the other identifiable risk factor (Table 2). Amongst the various risk factors studied either spontaneous or induced abortion was found in 31.25%. This was followed by a history of previous abdominopelvic surgery (23.75%).

Among women who had undergone surgeries 6.55% had tubectomy, 4.91% had previous LSCS and one patient had tuboplasty. History of self-administered MTPill intake was present in 16.39%. Repeat ectopic pregnancies were seen 1.63% of cases. There was no identifiable risk factor in 27.86% of cases.

III. Discussion

Ectopic pregnancy is a life threatening emergency in obstetrics. It remains as an important contributor to maternal morbidity and mortality, and is one of the commonest causes of 1st trimester maternal deaths. The prevalence of ectopic pregnancy among women who go to an emergency department with first trimester bleeding, pain or both, varies from 6 to 16%.¹⁰ Globally its incidence has been on the rise over the past decades, complicating 0.25-2.0% of all pregnancies worldwide. It accounts for 3.5-7.1% of maternal mortality in India.^{11,12} In India the incidence of ectopic pregnancy reported by the Indian council of medical research (ICMR 1990) task force in their multi-centric case control study was 3.12 per 1000 pregnancies or 3.86 per 1000 live births in the hospital reported pregnancies. In present study the incidence is significantly higher at 3%, than most of the other studies in developing countries, where it ranges from 0.56-1.5%.^{2,10,13-15}

In the present study majority of cases belonged to age group of 25-29 years (43.75%) similar to most of the studies from developing countries. Younger age group has high prevalence because they are more active sexually, predisposed to STI, PID and their sequelae. Studies in USA, however reported an increasing incidence of ectopic pregnancy with advancing age. The difference observed in our country might be owing to the fact that women here enter in to married life earlier and end reproduction earlier too. In the present study, maximum occurrence of ectopic gestation was seen predominantly in higher birth order. Some studies showed no specific relation to parity, but few reported that there is a decrease in the incidence of ectopic pregnancy with rising parity.^{7,9} In the ICMR multi-centric case control study of ectopic pregnancy, majority of women were young and had low parity.¹⁰

In the present study group, medical therapy was given in 2cases, (2.5%), who fulfilled the criteria for medical management. Similar number of medically managed cases were reported by Maji et al (1.75%).¹⁶ Salpingostomy was done in 3.75% cases of unruptured cases which is correlating with study done by Maji et al (1.75%).¹⁶

There was no mortality in the current study. Maternal mortality due to ectopic pregnancy is reported between 0% and 1.3% in various studies.^{10,14,20} It is possible to prevent maternal mortality in low-resource countries by maintaining basic clinical and surgical skills.

IV. Conclusion

Ectopic pregnancy is still a major challenge in obstetrical practice because of its bizarre clinical presentation and is one of the commonest causes of pregnancy related deaths in the first trimester. It can be diagnosed early by keeping a high index of suspicion. Despite exhaustive efforts to prevent ectopics the numbers are constantly rising due to increased reporting of the cases and improved diagnostic modalities. Delay in referral causes significant morbidity and diminishes the chances of preserving future fertility. Mass education

regarding safe abortion practices and post abortal care should be promoted. Unsupervised usage of MTP pill intake should be condemned.

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