ORIGINAL RESEARCH PAPER

Medical Science

RISING TREND IN ECTOPIC PREGNANCY: A CLINICAL STUDY AT A TERTIARY CARE HOSPITAL OFJAIPUR, RAJASTHAN

KEY WORDS: Ectopic, Laparotomy, Salpingectomy.

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ABSTRACT

AIM:1.To study rising trend in the cases of ectopic pregnancy .
2.To evaluate risk factors and suggest methods to reduce its incidence.
METHOD: A total of 85 cases of ectopic pregnancy were analyzed, over a period of 1 year that is from June 2017 to May 2018 at S.M.S Medical College and Hospital.
RESULTS: The incidence of ectopic pregnancy was 12.8/1000 deliveries. Majority of cases were multigravidas and of gestation age between 6 to 10 weeks. The common risk factors were PID, previous history of abortion, prior tubal surgery, infertility. Ultrasound, urine pregnancy test, serum B-hCG titre were done. Laparotomy was done in all cases. Surgery in form of salpingectomy, salpingo-oophorectomy ,and uterine reconstruction was done. No maternal mortality occurred.
CONCLUSION: Early diagnosis, identifying risk factors and timely management in form of conservative/ surgical treatment helps in reducing the morbidity and mortality.

INTRODUCTION

Ectopic pregnancy is defined as a pregnancy where the fertilized ovum gets implanted and develops at a site other than normal uterine cavity. It represents a serious hazard to a woman's health and reproductive potential requiring prompt recognition and early aggressive intervention. It is a leading cause of maternal morbidity and mortality in the first trimester.

The incidence of ectopic pregnancy has steadily risen. It ranges from 1:25 to 1:250.pregancies. Average range is 1 in 100 pregnancies. The incidence has increased due to increased incidence of PID, use of IUCD,Tubal surgeries, and Assisted Reproductive Techniques(ART). Now it accounts for nearly 2% of all pregnancies. The risk of EP is approximately 2 % with late marriages and late child bearing and 5 % with ART respectively.
Recurrence rate for Ectopic Pregnancy is 15% after 1; and 25% after 2 ectopics.

Transvaginal ultrasonography (TVS) coupled with quantitative serum beta hCG estimation has increased the diagnostic accuracy manifolds although each modality has its own limitation. Despite tremendous advances in the medical science, diagnosis of ectopic pregnancy is not always easy..The classic clinical triad of amenorrhoea, lower abdominal pain, and bleeding per vaginum is present in less than 50% of cases.

MATERIALS AND METHODS

Clinically and/or sonologically suspected cases of ectopic pregnancy admitted over a period of 1 year extending from June 2017 to May 2018 in a tertiary care hospital of Jaipur, Rajasthan formed the study group.

A total of 85 cases reported during this time frame with ectopic pregnancy were included in this study. The case records of the patients were traced from medical records department and operation theatre registers. Information regarding total number of deliveries during study period, details of demographic characteristics, presenting clinical symptoms and signs, detailed obstetric history, parity, gestational age at presentation, use of contraception, risk factors for ectopic pregnancy, diagnostic tool used, treatment modalities (whether surgical or medical), intraoperative findings and outcomes of ectopic pregnancy were recorded. Data were collected, tabulated and analysed. Detailed clinical, menstrual and treatment history was obtained from each patient. A urine pregnancy test was performed as a bedside test to diagnose pregnancy. Baseline beta hCG levels were obtained. A Trans vaginal sonography (6-10 MHz) was performed in all the suspected cases to establish the diagnosis

RESULTS

Table 1: Age and parity wise distribution of cases

DISTRIBUTION	NO OF CASES	PERCENTAGE(%)
AGE(Years)		
Below 20	7	8.2
Between 20-29	66	77.6
>/= 30	12	14.1
PARITY		
0	18	21.1
1	23	27.1
2	25	29.4
=/>3	19	22.3

Table1:During the study period, there were a total of 6600 deliveries and 85 cases of ectopic pregnancy were admitted in the hospital. The incidence of ectopic pregnancy in the present study was 12.8 per 1000 deliveries. Majority (77.61%) of the patients were in the age group of 20 to 29 years. Multiparous women were found to be more prone to have ectopic pregnancy (65.75%, 67/85) as depicted.

TABLE 2:RISK FACTORS FOR ECTOPIC

RISK FACTOR	NO. OF CASES	PERCENTAGE(%)
Previous abortion	15	17.6
Previous LSCS	10	11.8
Previous Ectopic	04	4.7
Pelvic Inflammatory Disease	41	48.2
Infertility Treatment	09	10.6
Tubal Surgery (Ligation/Tubo plasty)	06	7.1
Intra uterine Contraceptive Device	-	-

Table: 2 Presents a glance at the major risk factors among the study participants. The majority (48.2%) of the patients had previous history of pelvic inflammatory disease. Out of the six patients who underwent sterilization, two had post-partum sterilization and four had laparoscopic sterilization. None of the patients had concurrent sterilization with caesarean section. Four out of the 85 patients had previous ectopic pregnancy hence the recurrence rate was 4.71%.

TABLE 3: CLINICAL PRESENTATION

CLINICAL SYMPTOM	NO. OF CASES	PERCENTAGE(%)
Asymptomatic	03	3.5
Abdominal Pain	75	88.2

Spotting	34	40
Bleeding per vaginum	17	20
Shock	20	23.5

Table 3:The most common clinical presentation was abdominal pain(88.2%).20 out of 85(23.1%) cases presented in a state of shock. However there was no mortality.

TABLE 4: SITE OF ECTOPIC PREGNANCY ON LAPAROTOMY

SITE	NO OF CASES	PERCENTAGE(%)
Ampulla	52	61.2
Cornu	02	2.3
Isthmus	13	15.3
Fimbria	04	4.7
Heterotypic	01	1.1
Ovarian	07	8.2
Rudimentary horn	01	1.1
Abdominal	01	1.1
Broad Ligament	01	1.1

Table 4: In our study , the most common site of ectopic pregnancy was ampulla(61.2%) followed by isthmus(15.3%/).It is noteworthy to have one case each of heterotypic, Rudimentary horn, abdominal and broad ligament ectopic pregnancy.

TABLE 5: INTRA OP FINDINGS ON LAPAROTOMY

INTRA OP FINDINGS	NO. OF CASES	PERCENTAGE(%)
Unruptured	10	11.8
Tubal rupture	57	67.1
Tubal Abortion	11	12.9
Haemoperitoneum	71	83.5
Adhesions	09	10.6
Ovarian rupture	05	5.9
Rudimentary Horn	05	5.9

Table 5: It depicts that 67.1% had ruptured tubal ectopic.83.5% had haemoperitoneum..Most of the patients were given blood transfusion. All cases underwent unilateral salpingectomy. There was no post operative complications, wound infections, transfusion reactions or mortality.

DISCUSSION

In our study the incidence of ectopic pregnancy is 12.8 per 1000 deliveries while it was reportedly 15.2/1000 live births in the study of Rose Jophy et all (2002) and 1:250 in another study by ICMR(1990). In general, owing to growing use of assisted reproductive techniques and higher rates of early detection, the overall incidence of ectopic pregnancy is on a rise. Ectopic pregnancy may be the only life - threatening emergency in which prevalence has increased as mortality has declined. Despite significant reduction in the mortality rate , ectopic pregnancy continues to be the leading cause of pregnancy related deaths during the first trimester. Ruptured ectopic accounts for 10-15% of all maternal deaths. In our study 67.1% cases reported with rupture Ectopic pregnancy In this Study, the highest frequency of ectopic pregnancy was recorded among age group of 25 to 34 years, similar results were found in different studies. The highest incidence of ectopic pregnancy was noted among multiparous women which is close to other studies.

The key to successful management of Ectopic pregnancy essentially lies in high index of clinical suspicion, appropriate risk stratification, early diagnosis (with TVS, beta hCG estimation) and timely management. Fortunately there was no fatality in our study. It is important to remember that no amount of symptoms and physical signs can make a diagnosis or exclude diagnosis of Ectopic pregnancy with certainty. This is primarily because of a significant clinical overlap with other related/unrelated conditions like (ruptured follicle, ovarian torsion, various phases of abortion, pelvic inflammatory disease, acute appendicitis, calculus disease of the urinary tract, etc.).

CONCLUSION

In developing countries, a majority of hospital based studies have reported that case fatality rate is declining in ectopic pregnancy. However there is a rising trend in incidence of ectopic pregnancy due to more use of assisted reproductive techniques as well as early detection by the availability of more sensitive methods such as beta- hCG titre, and transvaginal sonography. It is the most important cause of maternal morbidity and mortality in the first trimester. Proper evaluation of pregnancy with associated risk factor and timely intervention will help in preserving fertility as well as decreasing morbidity and mortality.

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