

Original Research Article

Retrospective study of ectopic pregnancy in tertiary care centre

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Abstract

Background: Ectopic pregnancy is one in which fertilized ovum become implanted in site other than normal uterine cavity. Ectopic pregnancy commonly occurs in the fallopian tube. Ectopic pregnancy is the leading cause of maternal death in early pregnancy. The diagnosis of ectopic pregnancy is complicated by wide spectrum of clinical presentations, from asymptomatic cases to acute abdomen, and hemodynamic shock. There is considerable regional variation in its incidence.

Materials and methods: Retrospective analysis of all cases of ectopic pregnancy admitted in IGIMS, Patna was done from January 2014 to December 2016.

Results: The incidence of ectopic pregnancy in present study was 2.1%. Majority of patients were multigravida (94.1%) and in the age group of 25-35 years (70.4%). PID was the strongest risk factor found in 35.29%. Other risk factors were tube ligation (23%), LSCS (11.76%), history of abortion/MTP (17.64%). Commonest clinical presentation was pain abdomen (88.23%) followed by amenorrhoea (70.58). bleeding per vagina and adnexal mass was clinical presentation in 64.7% of patients. The site of ectopic was fallopian fallopian tube in all the patients and all patients were managed surgically. Anemia, blood transfusion and wound dehiscence was the commonest morbidity seen. No mortality was reported in the present study.

Conclusion: The incidence of ectopic pregnancy is on rise. It is a common life threatening emergency in first trimester of pregnancy that leads to serious maternal morbidity and also can cause mortality. A high index of suspicion is required for its early diagnosis, so that proper management can be done and the complications can be avoided.

Key words

Ectopic pregnancy, Fallopian tube, Morbidity.

Introduction

Ectopic pregnancy is one in which fertilized ovum become implanted in site other than normal uterine cavity. Ectopic pregnancy commonly occurs in the fallopian tube [1]. Ectopic pregnancy is the leading cause of maternal death in early pregnancy [2]. The diagnosis of ectopic pregnancy is complicated by wide spectrum of clinical presentations, from asymptomatic cases to acute abdomen, and hemodynamic shock [3]. There is considerable regional variation in its incidence. Associated risk factors include sexually transmitted infection, pelvic inflammatory diseases, previous tubal surgery, previous ectopic pregnancy etc. Management depends upon clinical presentation, site of rupture and future reproductive desire. Management can be medical, surgical or conservative. There is considerable regional variation in its incidence and globally the incidence is on rise. Although the overall incidence is rising in the past three decades but the case fatality has come down, this is because of early diagnosis and management. Worldwide the incidence of ectopic pregnancy is 0.25%-2.0% [4]. According to last national data reported by Centers for Disease control the incidence of ectopic pregnancy is approximately 2% [5].

Aim and objective

- To know the age group, parity and risk factors with respect to ectopic pregnancy
- To know the clinical presentation and intervention required
- To know the outcome of ectopic pregnancy

Materials and methods

This retrospective study was done in the department of Obstetrics and Gynecology from January 2014 to December 2016. Retrospective analysis was done to determine the incidence, clinical features, risk factors and outcome of ectopic pregnancy. Data was collected from medical record section, labour room registers and operation theatre registers. All patients diagnosed with ectopic pregnancy were included in the

study. A detailed proforma was obtained including age, risk factors, obstetric history, clinical presentation at the time of admission, radiological finding and management done.

Type of study: Retrospective analytical.

Results

The incidence of ectopic pregnancy in the present study was 2.14% (17/792). Urine pregnancy test was done in all cases for provisional diagnosis. Majority of patients were multigravida and in the age group of 25 to 35 years. The site for ectopic was fallopian tube in all patients in the present study. In 58.8% the clinical presentation was acute and the site was right fallopian tube. All patients in the present study were managed surgically.

Table - 1 shows that the maximum number of patients were above the age of 25 years which was around 70.5%. **Table - 3** depicts that the majority of patients were multigravida which was 94% in the present study. This shows that the maximum incidence of ectopic is in the higher age group and in multiparous patients.

Table – 1: Distribution of cases according to age.

Age	Number	Percentage
<20yrs	0	0
20-24yrs	3	17.64%
25-29yrs	6	35.29%
30-34yrs	6	35.29%
35-40yrs	2	11.76%

Table - 2 shows the risk factors associated with ectopic pregnancy. In the present study history of pelvic inflammatory disease was commonly associated with ectopic pregnancy and was seen in 35.29% of patients, it was followed by previous history of tube ligation in 23% of patients. History of cesarean section, abortion/MTP and use of intrauterine contraceptive device were other risk factors contributing to the incidence of ectopic pregnancy.

Table – 2: Distribution according to associated risk factors.

Risk factors	Number	Percentage
PID	6	35.29%
BLTL	4	23%
LSCS	2	11.76%
IUCD	2	11.76%
Abortion/ MTP	3	17.64%

(PID- pelvic inflammatory disease, BLTL- bilateral tube ligation, LSCS- lower segment caesarean section, IUCD- intrauterine contraceptive device, MTP- medical termination of pregnancy)

Table – 3: Distribution of cases according to parity.

Parity	Number	Percentage
Primiparous	1	5.8%
Multiparous	16	94.1%

Table – 4: Distribution according to clinical presentation.

Clinical presentation	Number	Percentage
Pain abdomen	15	88.23%
Amenorrhoea	12	70.58%
Bleeding per vagina	11	64.70%
Shock	2	11.76%
Adnexal mass	11	64.70%

Table – 5: Complications.

Complication	Number	Percentage
Blood transfusion	14	82.35%
Sepsis	5	29.41%
ICU admission	2	11.76%
Wound dehiscence	4	23.52%
UTI	3	17.64%
Mortality	0	0%

(UTI- urinary tract infection, ICU- intensive care unit)

Table - 4 depicts the clinical presentation of patients with ectopic pregnancy in the present study. Pain abdomen was the most consistent symptom that was present in 88.23% of patients. Majority of patients in the present study also

presented with bleeding per vagina and adnexal mass that is around 64.70%.

Table - 5 shows the morbidity and mortality associated with ectopic pregnancy. Blood transfusion was needed in 82% of patients. Other morbidities noted was sepsis and wound dehiscence.

Discussion

The incidence of ectopic pregnancy in the present study was 2.14%, this is comparable to study done by Rajendra Wakankar and Kshama Kedar in 2015 who reported the incidence of ectopic pregnancy to be 1.99% [6]. In study of Shraddha Shetty K, et al. in 2014 the incidence of ectopic pregnancies was 5.6/1000 deliveries [7]. Anuradha Murugesan, et al. in 2016 in their study found the incidence of ectopic pregnancy 1.77% [8]. Lakhmi Nair, et al. found the incidence of ectopic in their study to be 0.7% [9]. In a study by Costa, et al. in 2004 the annual incidence of ectopic pregnancy worldwide was found to be 0.1-0.17 in women of age group 15-44 years [10]. The increase in incidence in present study is due to the better diagnostic facilities available .In the present study UPT was done in all patients and ultrasound was done in 15 (88.23%) patients for the diagnosis. UPT was positive in 14 (82.35%) patients. This is comparable to the study done by Shraddha Shetty K et.al UPT (87.1%). In present study right sided tubal ectopic (58.82%) was more common than left sided, this is comparable to the study done by Khaleque, et al. (60%) [11]. Most common age group in this study was 25-35 years, and majority of patients were multigravida. In study of Shraddha Shetty K, et al. in 2014 majority of the patients (74.2%) belonged to the age group of 25-30 years.16.1% were primiparas and 83.9% were multiparas. In this study pelvic inflammatory disease was found to be strongest risk factor (35.29%), similar result was seen by Yakasai, et al. (31.68%) [12]. History of tubal ligation was noted in 23% of patients which is comparable to the study done by Singh S, et al. [13]. Similar to present study (23%) history of

previous LSCS was found in 27.7% of patients by Lakhmi Nair, et al. [9]. 17.64% of patients had history of abortion/MTP, this is comparable to the study done by Khaleeqe, et al. In the present study 11.76% of patients were using intrauterine contraceptive device as a method of contraception, this is close to the finding of Khan, et al. [14]. IUCD has no effect on ovulation, it prevents intrauterine pregnancy but not tubal or ovarian, so chances of ectopic are more if patients conceive with IUCD in situ [15].

Pain abdomen was the most common presentation in present study and was seen in 88.23% of patients, followed by amenorrhoea (70.58%), this was comparable to the study done by Shraddha Shetty K, et al. Bleeding per vagina was the presenting symptom in 64.70% of patients in this study similar to Yakasai, et al. (64.36%). Adnexal mass felt in 64.70% of patients in this study comparable to study done by Gaddagi and Chandrashekhar (70.3%) [16].

Morbidity included anemia, blood transfusion and sepsis. Blood transfusion was needed in 82.35% of patients; wound dehiscence was seen in 23.52% of patients. Fortunately, there was no mortality reported in the present study similar to study of Shraddha Shetty K, et al. [7] and Udigwe, et al. [17].

All patients in the present study were managed surgically. The high rate of surgery is because the hospital is a tertiary care centre and patients themselves present late or referred from other centres.

Conclusion

The incidence of ectopic pregnancy is on rise. It is a common life threatening emergency in first trimester of pregnancy that leads to serious maternal morbidity and also can cause mortality. It not only leads to pregnancy wastage but also increases the chance of recurrence and adversely affects women future fertility. A high index of suspicion is required for its early diagnosis, so

that proper management can be done and the complications can be avoided.

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