



STUDY OF ECTOPIC PREGNANCY AT TERTIARY CARE CENTER

Gynecology

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ABSTRACT

Ectopic Pregnancy is the one in which the blastocyst implants anywhere other than the endometrial lining of the uterine cavity. Ectopic pregnancy has always challenged ingenuity of the obstetrician and Gynecologist by its bizarre clinical picture. If it is not attended in time, it may lead to maternal morbidity and mortality. Hence to diagnose ectopic, one has to be ectopic minded. Increased awareness of ectopic pregnancy and knowledge of the associated risk factors helps identify women at higher risk in order to facilitate early and more accurate diagnosis. This is a retrospective study, in which parameters like age, parity, presenting symptoms, examination findings, predisposing factors and management of case are noted, to know the common mode of clinical presentation and treatment modalities. We conclude that whenever a patient in a reproductive age group has any of the symptoms like abnormal vaginal bleeding, pain abdomen, giddiness, we need to be 'ectopic minded'. Risk factors need to be considered. And last but not the least, it is the quickest surgery to be done, be it open or scopy, catch the bleeding site and excise.

KEYWORDS

ectopic, quick in and quick out.

INTRODUCTION

Ectopic Pregnancy is the one in which the blastocyst implants anywhere other than the endometrial lining of the uterine cavity.

Ectopic pregnancy remains the leading cause of maternal deaths in early pregnancy¹. In developing countries, a majority of hospital based studies have reported ectopic pregnancy case- fatality rates of around 1%-3%, 10 times higher than those reported in developed countries².

Ectopic pregnancy has always challenged ingenuity of the obstetrician and Gynecologist by its bizarre clinical picture. If it is not attended in time, it may lead to maternal morbidity and mortality. Hence to diagnose ectopic, one has to be ectopic minded. Although women with ectopic pregnancy frequently have no identifiable risk factors, a prospective case- controlled study has shown that increased awareness of ectopic pregnancy and knowledge of the associated risk factors helps identify women at higher risk in order to facilitate early and more accurate diagnosis. Most risk factors are associated with risks of prior damage to the fallopian tube.³

Patients with an ectopic pregnancy commonly present with pain and vaginal bleeding between 6 and 10 weeks gestation⁴.

With the rapid decline in the number of intrauterine pregnancy, during the past decade, the frequency of extrauterine pregnancy become more apparent because of attitudinal change in sexual activity, young population, the rising incidence of venereal diseases, effective role of modern antibiotics, therapy in salpingitis, use of contraceptive measures and assisted reproductive technique.⁵

The diagnosis is by sensitive and specific radio-immuno assays of beta-human chorionic gonadotropin, sensitivity 98-100%⁶ and high resolution transvaginal ultrasound (sensitivity 82-95% and specificity of 93-95%)⁷ Laparoscopy is regarded as the definitive diagnostic test in suspected ectopic pregnancy and laparoscopic treatment of tubal pregnancy is safe and effective. It has false negative rate of 3-4% and false positive rate of 5%. However a combination of clinical features, a high index of suspicion with quantitative beta- hCG and high resolution transvaginal ultrasound scan have enabled an early and accurate diagnosis of ectopic pregnancy to be made without resorting to laparoscopy. The treatments available are expectant, medical or operative (laparotomy or laparoscopy). Factors influencing the choice of treatment include patient's condition at admission, surgeon's expertise, availability of advance technology. The morbidity and mortality associated with ectopic pregnancy are directly influenced by the time interval between the onset of symptoms and start of treatment.⁸

AIMS & OBJECTIVES OF STUDY.

1) To know the age group, parity and the risk factors with respect to

ectopic pregnancy.

- 2) To study the clinical presentation of the ectopic pregnancy.
- 3) To study the methods for early detection and different modalities of treatment of ectopic pregnancy.

MATERIALS AND METHODS

This is a retrospective study conducted in the department of obstetrics & gynecology at GMC, Miraj during the period of Jan 2015 to Dec 2015. Data was collected from indoor register of gyn ward and indoor papers were collected from record section. Data was tabulated in Excel sheet, parameters included age, parity, presenting symptoms, examination findings, predisposing factors and management of case. All the cases were diagnosed by culdocentesis or ultrasonography and confirmed by urine pregnancy test. Patients were resuscitated by blood transfusions & were posted for explorative laparotomy. All patients were given proper contraceptive counselling after surgery & were warned for alarmic signs of ectopic pregnancy. Also they were asked to follow up immediately when they missed menses.

RESULTS

There were total of 19 ectopic pregnancy cases during this period, the total number of deliveries being 4701. Hence the incidence comes to be 4.04 per 1000 deliveries.

Majority of patients in our study belonged to age group of 21-30 yrs.

Table 1- Age wise distribution.

Age of patients(yrs)	Number of patients	Percentage(%)
<21	2	10.5
21-30	13	68.4
31-35	2	10.5
>35	2	10.5

Majority were of 3rd parity, followed by 2nd para.

Table 2- Parity wise distribution.

Parity	Number of patients	Percentage (%)
0	1	5.2
1	1	5.2
2	5	26.3
3	9	63.1
>3	3	15.8

The common risk factors found were some form of tubal surgery mainly the tubectomy and previous history of PID.

Table 3- Distribution according to predisposing factors.

Predisposing factors	Number of patients	Percentage (%)
Tubal surgery	8	42

Infection	6	31.6
Previous Abortion	3	15.8
Previous ectopic	1	5.3
Infertility	1	5.3
Not identified	5	26.3

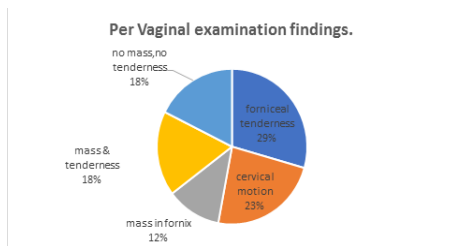
The common symptoms by which patients presented were pain in abdomen followed by abnormal vaginal bleeding. 3 patients (15.6%) had come in shock. They were resuscitated by colloids and blood transfusions, then taken for exploratory laparotomy. 8 patients (42%) had come with Hb<8. Whole blood and PCV given pre operatively according to severity.

Table 4- Symptoms wise distribution.

Symptoms	Number of patients	Percentage (%)
Abdominal pain	18	94
Amenorrhoea	9	47
Abnormal vaginal bleeding	11	57
Giddiness	5	26

On per vaginal examination, forniceal tenderness was seen in 5 women (26%) followed by cervical motion tenderness in 4 women (21%). 3 women (15%) neither had mass in fornix nor tenderness elicited.

Chart 1- Distribution according to per vaginal examination findings.



The commonest site of location of ectopic pregnancy was in ampulla of fallopian tube (31.6%) followed by isthmus(15.8%)

Table 5- Site wise distribution

Site of ectopic	Number of patients	Percentage (%)
Ampulla	6	31.6
Isthmus	3	15.8
Fimbria	1	5.2
Ovary	1	5.2
Cervical	1	5.2
Heterotopic	1	5.2

Most common Surgery done was partial Salpingectomy on affected side(42%) followed by total Salpingectomy (26.3%) In 1 case tubo-tubal anastomosis was done as she had history of previous ectopic, left with single tube and presented with ectopic in that single tube.

Table 6- Distribution according to mode of surgery.

Mode of surgery	Number of patients	Percentage (%)
Total Salpingectomy	5	26.3
Partial Salpingectomy	8	42
Salpingo- oophorectomy	4	21
Tubo- tubal anastomosis	1	5.2

13 patients (68.4%) had hemoperitoneum>1litre intra operatively. Thankfully no mortality seen.

DISCUSSION.

The incidence of ectopic pregnancy in present study was 4.04 per thousand deliveries. This coincides with study conducted by Dr. Shradha Shetty at Lady Ghoshen Hospital, Mangalore, in which incidence was 5.6 per 1000 deliveries and in Porwal Sanjay et al⁹ study, where incidence was 2.46 per 1000 deliveries. All 3 hospitals are tertiary hospitals.

The mean age of the women in the study was 27.32 years. This is because Indian women are in their reproductive career in these ages. Also women are exposed to STD and contraceptives like IUCDs in this

age group. Similar results were found in Khaleequeet al¹⁰ study. Hoover KW & colleagues¹¹ reported that ectopic pregnancy rate increases with age, it was 0.3% among girls and women aged 15-19yrs and 1% among women aged 35-44 yrs.

Mean parity in this study was 2.68. This is because of puerperal infections leading to tubal damage. Multiparous women were found to be more prone to have ectopic pregnancy (61%) at Laxmikarki et al¹² study.

The commonest predisposing factors noted in our were tubal surgery, previous infections. In 26% there was no identifiable risk factors. According to study conducted by RashmiGaddagi et al.¹³38% women had no identifiable risk factors, 18 % had history of previous abortions, 16% had history of tubal surgery, 16% had history of infertility.

In our study, majority of women presented with pain in abdomen (94%) and abnormal vaginal bleeding. Similar results were seen in study conducted by Rashmi G. et al, in which 89% of women presented with pain in abdomen &75% with history of abnormal vaginal bleeding. As per study conducted by Shradha K. et al 80% women presented with pain abdomen and 77% with abnormal vaginal bleeding.

The commonest per vaginal examination findings in our study were forniceal tenderness (26%) and cervical motion tenderness (21%). In 15% of women, neither mass in fornix nor tenderness were noted, suggesting we should have high index of suspicion when diagnosing ectopic pregnancy. As per study conducted by Rashmi G. et al,75% women presented with cervical motion tenderness and 70% with mass in fornix.

In our study, commonest sites of ectopic pregnancy were ampulla (31.6%) and isthmus(15.8%) Similar results were seen in study conducted by Panchal et al¹⁴ and Shradha et al.

The treatment options for ectopic pregnancy are medical management by methotrexate, conservative surgeries like salpingostomy, total/partial Salpingectomy and salphingo-oophorectomy. As medical management needs extremely close follow up and hospitalization, surgical management is still the method of choice in our country.¹⁵Conservative surgeries though considered superior to radical surgeries, not followed because of increased risk of repeat ectopic. Laparoscopy or laparotomy chosen depends on patients condition and surgeon's choice as laparoscopy has a long learning curve. In our study laparotomy was preferred method. 42% underwent partial Salpingectomy and 26.3% total Salpingectomy. As per study conducted by Shradha et al, unilateral Salpingectomy done in 90% of women followed by salpingo oophorectomy in 6% of women.

CONCLUSION

Whenever a patient in a reproductive age group has any of the symptoms like abnormal vaginal bleeding, pain abdomen, giddiness, we need to be 'ectopic minded'. It is the thing diagnosed at a spot and if not diagnosed, can take life of the patient. Identification of risk factors like STDs, IUCDs and tubal surgeries is important, as women with these risk factors are prone to ectopic pregnancy. And last but not the least, it is the quickest surgery to be done, be it open or scopy, catch the bleeding site and excise.

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