

A Retrospective - Two Years Study of Ectopic Pregnancy in a Tertiary Care Hospital

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ABSTRACT

Objective: To determine the frequency, clinical presentation of ectopic pregnancy and assess the management with respect to morbidity and mortality.

Study Design: Descriptive Study

Place and Duration of Study: This study was conducted at the Department of Obstetrics and Gynecology, KMC Civil Hospital, Khairpur Mir's from August 2014 to July 2016.

Materials and Methods: A total of 60 cases diagnosed with ectopic pregnancy were included in this study. Data was collected from case sheets and operative registers, the data was analyzed with descriptive statistics.

Results: In two years review period, there were total of 11053 deliveries, 7743 gynecological admissions and 60 cases of ectopic pregnancies recorded. This gives a frequency of ectopic pregnancy 0.5% of total deliveries and 0.7% of gynecological admission. The majority of patients were 20 to 30 years (n=36,60%), it was noted more cases in multigravida (n=30,50%). Almost all patients came with abdominal pain (n=59,98%) whereas history of amenorrhea present in 93% and fainting attack was found in 66% of patients. Ectopic pregnancy was found to be ruptured in 98% cases, all were tubal ectopic except one case which was abdominal pregnancy. Laparotomy done in all cases. In relation to morbidity, anemia was present in 83% of cases and blood transfusion was done in 50 cases. There was no mortality in this study.

Conclusion: Ectopic pregnancy was found in multigravida. Abdominal pain was the only symptom which was present in almost all patients due to rupture ectopic pregnancy. In order to reduce morbidity there is need of a thorough clinical evaluation and appropriate investigation for patients with high suspicion of ectopic pregnancy so that our poor patients can be benefited by recent therapeutic modalities with avoidance of open surgery and better fertility conservation.

Key Words: Ectopic pregnancy, Fallopian Tube, Ultrasonography

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INTRODUCTION

An ectopic pregnancy is a complication of pregnancy in which the embryo implants outside the uterine cavity.¹ E.P pregnancy is a high risk condition that occurs in 1.9% of reported pregnancies.² The incidents of recurrent EP is between 5% and 20% and rises up to 32% following two EP.³ The real concerns are its increased incidence and impairment in fertility.⁴ Pregnancy – related maternal mortalities in the first trimester account for 4-10% of all pregnancy related deaths.⁵

E.P is an important cause of maternal morbidity and mortality especially in developing countries, where the majority of patients present late with rupture and hemodynamic compromise.⁶

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The etiology of ectopic pregnancy is not well understood. However several risk factors for ectopic pregnancy have been identified including a history of pelvic inflammatory disease (PID), smoking at the time of conception, previous ectopic pregnancy, previous pelvic surgery, induction of ovulation and intra uterine device usage.⁷ There is an increased frequency of EP after in-vitro fertilization (IVF) and related techniques.⁸

Clinical manifestation is connected with localization of ectopic pregnancy. FT is the most common area of ectopic implantation, represented in 97% of all ectopic pregnancies. Approximately, 80% of all ectopic pregnancies are localized in the tubal ampulla, 12% in the isthmic part, 5% in the fimbriae and 2% in the intestinal part. Other localizations are not common; these are ovarian, cervical and abdominal.⁹ Spontaneous bilateral EP is rare entity, conservation of fertility becomes an issue as bilateral salpingectomy is often required.¹⁰

EP is an important diagnosis to be excluded when a woman presents with bleeding in early pregnancy. As a consequence the clinical presentation of EP has changed from a life-threatening disease, necessitating emergency surgery to a more benign condition in an asymptomatic patient for whom non-surgical treatment options are available.¹¹

Diagnosis can be made by USG, serum Beta hCG, although the gold standard is laparoscopy.¹² Various studies of transabdominal sonography for detection of EP have shown clear diagnosis in 70% to 89% cases. However, transvaginal scan is superior to trans abdominal scan in most cases of pelvic pathologic.¹³ Early diagnosis reduces the risk of tubal rupture and allows more conservative treatment to be employed.¹⁴ Successful implementation of risk reducing counselling program before conception provides high risk patients with screening to identify and manage ectopic pregnancy.¹⁵

With respect to the management of EP, there has been tremendous technical advances. The early diagnosis and treatment of this condition over the past two decades allowed a definitive medical management of unruptured ectopic pregnancies.¹⁶

Surgical treatment may either be an open laparotomy or laproscopic depending on surgeons' skills equipment availability and condition of the patient.¹⁷

MATERIAL AND METHODS

This was retrospective study of all cases of ectopic pregnancy admitted in department of obstetrics and Gynecology Civil hospital, Khairpur Medical College, Khairpur Mir's from August 2014 to July 2016. All cases of diagnosed EP admitted through the emergency or outpatient department.

The diagnosis of EP was made by history, clinical physical examination, and laboratory investigations and USG. 60 patients were admitted with EP during last two years. Data on age, parity, clinical presentation, USG findings, finding at laparotomy and outcome of treatment were collected using case sheets and operative registers.

The total birth records and Gynecological admission for the study period were also collected from the Gynecology and labor room record books. Statistical analysis were performed using SPSS v. 21 and process involved descriptive Statistics using percentages.

RESULTS

In two years review period, there were total of 11053 deliveries, 7743 gynecological admission and 60 cases of ectopic pregnancies recorded. This give a frequency of E.P of 0.5% total deliveries and 0.7% of gynecological admission.

The majority of patients were 20 to 30 years. (n=36,60%), it was noted more cases in multi gravida (n=30,50%). Almost all patients came with abdominal pain (n=59,98%) whereas history of amenorrhea present in 93% and fainting attack was found in 66% of patients.

Ectopic pregnancy was founded to be ruptured in 98% cases, all were tubal ectopic except one case which was abdominal pregnancy. Laprotomy done in all cases.

In relation of morbidity anemia was present in 83% of cases blood transfusion was done in 50 cases. There was no mortality in this study.

Table No.1: Age Distribution

	No.	%
<20	10	16.6%
20-30	36	60%
>30	14	23%
Ectopic Pregnancy Gravidity		
Primigravida	6	10%
2nd – 4th	30	50%
>4	24	40%

Table No.2: Clinical Presentation

	No.	%
Abdominal pain	59	98%
Amenorrhea	56	93%
Fainting attacks	10	16%
Vaginal bleeding	40	66%
Shocks	4	6.6%
Shoulder tip pain	5	8.3%
G.I symptoms	3	5%

Table No.3: Ultrasound Findings

	No.	%
Rupture ectopic	59	98%
Unrupture ectopic	1	2%

Table No. 4: Morbidity & Mortality

	No.	%
Anemia	50	83%
Fever	5	8.3%
Wound sepsis	3	5%
Paralytic ileus	3	5%
Maternal death	Nil	Nil

Table No.5: Operative Findings

	No.	%
Haemoperitonium	59	98%
Ruptured ectopic	59	98%
Unreptured ectopic(abdominal)	1	2%

DISCUSSION

Ruptured EP is a life threatening gynecological emergency especially in developing countries where very poor maternal health and indexes.

In Nigeria the incidence of ectopic pregnancy is 2.3%⁶. In our study EP accounted for 0.5% of total deliveries and 0.7% for total gynecological admission, which is comparable with one study done in Pakistan but is low as compare to other studies in Pakistan.¹⁸

The incidence of EP was found to be highest in 20 to 30 years of age group in our study, which is consistent with the finding by the other researchers.¹⁹ This corresponds to the age of reproduction and peak sexual activity.

The highest incidence of EP was noted among parous women which is closed to other studies.¹⁸ it is not surprising as this may be explainable by the fact that a major risk factors of previous miscarriages precede the EP.¹⁹

Abdominal pain was a commonest clinical presentation in all patients that is 98% and this is often secondary to rupture due to late diagnosis and late presentation. Other clinical presentation included amenorrhea, shock, fainting attacks and vaginal bleeding. These occurred as a result of complications associated with ruptured ectopic gestation and could be life threatening without timely and effective intervention. This confirms the uniformity of a clinical presentation worldwide.

In our study the majority 98% of patients had ruptured EP that is because none of them diagnosed before the appearance of symptoms. Our diagnosis was mainly based on history and physical examination. Pregnancy tests were used to support the diagnosis and diagnosis conformed by transabdominal ultrasound USG. This is similar to finding from the developing countries where 70-95% of cases are ruptured at presentation.¹⁹

In our study anemia was present in 83% resulting in multiple blood transfusions. No other significant morbidity was encountered in our study. There was no mortality in this study. Other studies had mortality rate of 1.5 to 3.7%.¹¹ One study in Pakistan has shown a mortality rate of 1.6% among 62 patients with EP.²⁰

Mortality depends on the size of the study population and the clinical state of patients at presentation.

CONCLUSION

Ectopic pregnancy was found in multigravida. Abdominal pain was the only symptoms which was present in almost all patients due to rupture ectopic pregnancy. In order to reduce morbidity there is need of a thorough clinical evaluation and appropriate investigation for patient with high suspicion. In our poor patients can be benefited by recent therapeutic modalities with avoidance of open surgery and better fertility conservation.

Author's Contribution:

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