



**ORIGINAL RESEARCH PAPER**

**Obstetrics & Gynaecology**

**CLINICOPATHOLOGICAL STUDY OF ECTOPIC PREGNANCY – A 6 YEAR SURVEY**

**KEY WORDS:**

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**INTRODUCTION –**

Presence of pregnancy outside the uterine cavity is known as ectopic pregnancy. Most common site of ectopic pregnancy is the fallopian tube [9]. Other sites are cervix or rudimentary horn of the uterus, ovary, broad ligament or elsewhere in the peritoneal cavity. The commonest site in the tube is the Ampulla followed by the isthmus, infundibulum and interstitium[2]. The clinical presentation of ectopic pregnancy vary and is largely determined by the site of the ectopic within the tube. A pregnancy at isthmico-ampullary region may rarely go beyond 5 weeks whereas an interstitial pregnancy may go up to 12 weeks before rupturing [4]. The classical symptom triad of amenorrhoea, vaginal bleeding and abdominal pain is seen only in 50% cases that too in ruptured ectopic pregnancies.

**OBJECTIVES –**

This retrospective study aims to find the frequency of various clinical presentation and to obtain the pathological findings on surgical management including site and rupture and also to discuss the co-morbidities if present.

**MATERIAL AND METHODS –**

This was a retrospective analysis of ectopic pregnancies presented in a tertiary level hospital for past 6 years from 2008 – 2013. The case records of the patients were obtained from the medical records department. A total of 58 patients were diagnosed with ectopic pregnancy during this period. 2 patients refused treatment in our hospital and 2 patients were lost to follow up. From the records of 54 patients who took treatment in our hospital date and mode of admission , gestational age , mode of presentation , rate of surgical management , the intra operative findings including presence and amount of intra peritoneal hemorrhage , site of the ectopic pregnancy , type of ectopic (tubal abortion , rupture or unruptured) , type of surgery done , presence of pelvic adhesions etc was recorded. Any co-morbidities like anemia, shock, fever, post operative wound infection, UTI etc was also noted. All these information and data was recorded in detail in a proforma prepared by the investigator . The data was then analyzed by using SPSS software.

**RESULTS –**

Out of the 54 patients with ectopic pregnancy amenorrhoea was seen in 87%(47/54) patients. 94.4%(51/54) patients presented with varying degree of abdominal pain while 46.3%(25/54) presented with vaginal bleeding or spotting. 70.4%(38/54) patients presented to the casualty department with abdominal pain, 20.3%(11/54) had no symptoms and were diagnosed on routine ultrasonography evaluation, while 9.2%(5/54) were referred from other centers. 96.2%(52/54) patients were diagnosed to have tubal ectopic pregnancy , one case each of ovarian pregnancy and heterotrophic pregnancy was seen respectively. Hypotension was seen in 9.3% patients(5/54), abdominal tenderness was seen in 76%(41/54) patients . 48 patients out of 54 underwent surgical management .On surgical management right tube was more involved 52%(25/48) than left tube 45.8%(22/48). Most common site was ampulla 64.6%(31/48) followed by isthmus 12.5%(6/48), isthmico-ampullary 10.4%(5/48), fimbria 8.3%(4/48), ovary 2.1%(1/48) site was indeterminate in one patient. Tubal rupture was seen in 50%(24/48) patients, abortion in 39.5%(19/48), while 8.3%(4/48) had unruptured ectopic pregnancy. 62.5% (15/24) patients with rupture presented between 6-9 weeks of gestation. 93.8%(45/48) patients had varying degree of hemoperitoneum. 17.8%(8/45) had hemoperitoneum between 250-500 ml ,

24.4%(11/45) had between 500ml – 1000ml and 11.1 % (5/45) had >1000ml. pelvic adhesion was seen in 16.7%(8/48) patients. 43.8% (21/48) patients required blood transfusion. Post operative fever was seen in 6.3% (3/48) patients on the second day. All patients were discharged on the sixth or third post operative day depending on the surgery. Histopathology reports confirmed ectopic tubal gestation in 45 cases , one ovarian pregnancy , one heterotrophic and one report was inconclusive.

**DISCUSSION –**

Majority of the patients underwent surgical management as this was a tertiary level hospital and thus rate of surgery was high. Most common clinical presentation was abdominal pain 94.4% , similarly Lawani OL et al [5]2013 had 80% of their patients presenting with abdominal pain . In the present study amenorrhoea was seen in 87% while 46.3% presented with vaginal bleeding or spotting . In a study by Neetha bansal[6]80% presented with abdominal pain, 75.24% had amenorrhoea while 69.30% presented with vaginal bleeding. Same was seen in a study by Pradhan et al in Nepal[8]2006 where abdominal pain was seen in 94.4%, amenorrhoea in 72.2% and vaginal bleeding in 58.3% cases respectively.

Hypotension was seen in 9.3% patients(5/54) as all the five patients were referred from peripheral centers as ruptured ectopic gestation . Abdominal tenderness was seen in 76%(41/54) patients in this study , while a study by Akaba GO[1] 2012 90.4% patients had abdominal tenderness as the most common physical finding.

In the present study 96.2% cases were tubal ectopic gestation similar to a study by Vasquez G et al[9] 1983 where they found the 95% of ectopic pregnancy occurred in the tubes. Most common site of tubal gestation was ampulla 64.6% followed by isthmus 12.5% similar to a study by Bouyer et al[2] 2002 where they found that ampulla had 70%, isthmic 12%, fimbrial 11.1%, ovarian 3.2% respectively. In this study we had no interstitial or abdominal pregnancy. In this study tubal rupture was seen in 50% cases similar to study by Hamura NN et al [7] 2013 where the rate of tubal rupture at presentation was 48% . In our hospital 62.5% patients with rupture presented between 6-9 weeks of gestation ,which was similar in a study done by Neetha Bansal[6] where 54.45% patients presented at or before 8 weeks of gestation. Hemoperitoneum was seen in 93.8% cases and is due to the fact that majority of the patients presented with either rupture or tubal abortion both of which causes hemoperitoneum. Massive hemoperitoneum was seen in 11.1% cases only and all these cases were referred from a peripheral centers. This indicates the need for prompt referral services from centers which do not have the facilities for managing such cases. 43.8% of our patients required blood transfusion. As majority of the patients had hemoperitoneum, although the rate of massive hemoperitoneum was less still most patients probably had low preconception hemoglobin status to begin with and hence required blood transfusion intra and post operatively. This was similar to the study by Neetha Bansal[6] where 58.3% of patients were anaemic after surgery and blood transfusions was given. also in a study by Hamura NN[7] two thirds of the patients with ectopic pregnancy required blood transfusion. Pelvic adhesions was seen only in 16.7%(8/48) patients who underwent surgery whereas in a study by Gharoro EP et al [3]2002 pelvic adhesions was noted in 40.85% patients. This was due to the fact that in the same study the incidence of PID was high Post operative fever was the only morbidity seen apart from anemia in 6.3% patients which

occurred on the second post operative day and subsided on conservative management. There was no maternal mortality in this study due to prompt surgical management and blood transfusion.

#### CONCLUSION –

In this study we found that the most common symptom with which the patient presents is abdominal pain and this symptom is usually seen in ruptured ectopic pregnancy. Most common site of ectopic is ampulla of the fallopian tube. Rupture of ectopic gestation causes hemoperitoneum, requirement of blood transfusion and most often it is difficult to salvage the affected tube which in turn affects the future reproductive function of the patient. An obstetrician should be highly vigilant so as to diagnose the condition as early as possible and do a prompt management so that maternal morbidity and mortality can be prevented, and if possible save the affected tube so as to preserve the reproductive function of the patient.

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