

## A RETROSPECTIVE STUDY OF RISK FACTOR, AND CLINICAL PRESENTATION OF ECTOPIC PREGNANCY

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### Abstract

A total of 32 diagnosed cases were included in the study and evaluated for demographic characteristics, clinical symptoms, diagnostic tools used, treatment, risk factors, and morbidity and mortality. The results showed that majority of patients were in the age group of 20-30 years (59.37%) and multiparas (71.87%). Common risk factors included previous abortion and infertility. The common site of ectopic pregnancy was found to be the ampulla of the fallopian tube and the most common presenting complaint was abdominal pain (87.5%). Out of 32 cases, 30 underwent salpingectomy and 2 were managed medically. Morbidity included anemia and blood transfusion in all cases. The study highlights the importance of identifying risk factors and early diagnosis for reducing morbidity and mortality in ectopic pregnancy cases.

**Keywords:** Risk factors, Ectopic pregnancy, Amenorrhoea, Ampulla.

### Introduction

An ectopic pregnancy is a condition in which a fertilized ovum implants and grows at a location other than the normal uterine cavity [1]. This type of pregnancy can be challenging for obstetricians and gynecologists due to its varied and sometimes unexpected symptoms, ranging from asymptomatic cases to sudden abdominal pain and hemodynamic shock. Over the past few decades, the incidence of ectopic pregnancy has increased due to factors such as an increase in venereal diseases, more widespread use of contraceptives, and advancements in assisted reproductive techniques. Women who have had prior damage to their fallopian tubes, either from a previous ectopic pregnancy or from tubal surgery for infertility or sterilization, are at the highest risk of developing an ectopic pregnancy [2]. Accurate diagnosis requires a comprehensive history, physical examination, and correlation with diagnostic tests, and with the help of modern technology such as radioimmunoassay of beta-HCG and ultrasonography, diagnosis has become easier. Immediate intervention is critical to avoid maternal morbidity and mortality. Although the overall incidence of ectopic pregnancy continues to rise, the maternal mortality rate has decreased due to early diagnosis and improved management [3].

Effective anesthesia, blood transfusion capabilities, transportation, immediate resuscitation, and appropriate surgery are crucial to reducing maternal morbidity. Despite these advances, ruptured ectopic pregnancy remains a significant cause of pregnancy-related mortality and morbidity [2-3].

#### MATERIAL AND METHODS

**Study design:** A retrospective study of diagnosed cases of ectopic pregnancy at Kamla Raja Hospital, GRMC, Gwalior from 1 January 2017 to 30 June 2017.

**Participants:** 32 diagnosed case of ectopic pregnancy.

**Inclusion criteria:** All diagnosed cases of ectopic pregnancy

**Exclusion criteria:** All intrauterine pregnancies

#### Methodology

The study aimed to evaluate the clinical characteristics, diagnostic tools, treatment, and outcome of ectopic pregnancy among patients admitted to the KRH in Gwalior, India. During the study period, the total number of diagnosed cases of ectopic pregnancy was recorded and analyzed. The collected data included demographic details, clinical symptoms, diagnostic methods used, and treatment options. The surgical procedures performed were either partial or total salpingectomy, which were performed via open laparotomy and anesthesia used in all cases was either spinal or general. The study also evaluated the risk factors and morbidity and mortality associated with ectopic pregnancy.

#### RESULTS

Total No. of OBGY admissions of 6193 in KRH and out of these 32 cases of ectopic pregnancy were diagnosed. Out of 32 cases 30 cases of ectopic pregnancy were operated and 2 were kept on medical line of management.

Table 1: Parity wise distribution

	No. of patients	Percentage
Primi	9	28.12
Multi	23	71.87

Maximum patients were multiparas (71.87%).

Table 2: Age wise distribution of total number of patients

Age group (yrs)	No. of patients	Percentage
<20	2	6.25
21-25	10	31.25
26-30	9	28.12
31-35	7	21.87
36-40	4	12.5

Majority of patients belongs to age group 20-30 yrs (59.37%).

Table 3: Risk factors for ectopic pregnancy

Risk factor	No. of patients	Percentage
Previous abortion	5	15.62
Previous ectopic	1	3.12
Infertility	2	6.25

Tubal surgery	1	3.12
PID	1	3.12

**Table 4: Site of ectopic pregnancies on laparotomy**

Site of ectopic pregnancy	No. of patients	Percentage
Ampulla	27	84.37
Infundibulum	2	6.25
Isthmus	3	9.37

Common site of ectopic pregnancy was ampulla of fallopian tube.

**Table 5: Clinical features**

Clinical features	No. of patients	Percentage
Amenorrhea	27	84
Abdominal pain	28	87.5
Abnormal vaginal bleeding	24	75
Cervical motion tenderness	18	56.25

Commonest presenting complaint was abdominal pain (87.5%).

In our study of ectopic pregnancy cases admitted at KRH, Gwalior, a total of 32 patients were evaluated. Out of the 32 cases, 30 underwent partial or total salpingectomy as the method of treatment, while only 2 patients were managed medically. It is important to note that medical management requires close monitoring and hospitalization, whereas surgical management remains the preferred option in our country. The outcome of our study showed that all patients experienced anemia, requiring blood transfusion. It is crucial to identify the risk factors and detect the patients in the early stages of the condition in order to minimize morbidity and prevent any adverse outcomes.

### Discussion

Incidence of ectopic pregnancy has increased over the last two decades due to modern lifestyle changes. Recent increase in artificial reproductive techniques and the tubal block restoration surgeries have substantially contributed to the increase of ectopic cases in the background of having other high-risk factors. Most risk factors are associated with risk of prior damage to the fallopian tube. These factors include any previous pelvic or abdominal surgery, and pelvic infection [4].

Majority of women in our study group belongs to the age group of 20 -30 years (59.37%) which correlate with the study done by Samiya Mufti et al, Panchal D et al and Rashmi [5,6]. Most of the women in India marry at an early age and this age correspond to peak sexual activity and reproduction.

In our study most of the women with ectopic pregnancy were multigravida (71.87%). This correlate with the studies done by Shraddha Shetty K, et al (83.9%), Panchal D et al and Poonam et al [6,7,8].

In this study the most common risk factor for ectopic pregnancy was previous abortion (15.62%) which is comparable to the study done by Khaleeque, et al. [9]

In this study one women (3.12%) with history of PID present with ectopic pregnancy. This is not correlate with study done by Bhavna Gupta et al (22.7%) [10]. Tubal infection both endo and exosalpingitis causes tubal mucosa damage and leads to ectopic pregnancy.

In this study 6.25 % of women with ectopic pregnancy were infertile which is similar to studies done by Panchal D et al and Samiya Mufti et al [5,6].

In our study 3.12 % of women gave the history of previous ectopic pregnancy which is similar to studies done by Samiya Mulfti et al and Uzma Shabab et al [4,5]. This is because of underlying tubal pathology.

In this study one women (3.12%) with ectopic pregnancy had tubal sterilization which is not correlate with the studies done by Uzma Shabab et al and Shrestha et al [5, 11]. Tubal sterilization leads to ectopic pregnancy might be because of improper surgical technique, formation of peri tubal fistulas, congested and edematous tube in the postpartum period may increase the chances of incomplete tubal occlusion leading to ectopic pregnancy [12,13].

The commonest site of location of the ectopic pregnancy was in the ampulla of fallopian tube. Ampulla is commonly involved in most of other studies [14,15].

Most common presenting complaints in our study was abdominal pain, amenorrhea and vaginal bleeding. In Porwal Samjay et al study, most of the women with ectopic pregnancy presents with pan abdomen, bleeding per vagina and 90% women had history of amenorrhea from 6 weeks to 4 months.

## CONCLUSION

The common site of ectopic pregnancy was found to be the ampulla of the fallopian tube and the most common presenting complaint was abdominal pain, common risk factors included previous abortion and infertility. Morbidity included anemia and blood transfusion in all cases. The study highlights the importance of identifying the risk factors for ectopic pregnancy and to diagnose and manage the condition at the earliest opportunity in order to prevent maternal morbidity and mortality. A combination of a thorough medical history, physical examination, and diagnostic tools such as radioimmunoassay of beta-HCG and ultrasonography can aid in the accurate diagnosis and management of ectopic pregnancy.

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