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# Original Research

## To determine cases of ectopic pregnancy reported to emergency department

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***ABSTRACT*:**
**Background:** Ectopic pregnancy is implantation of fertilized ovum any site other than uterine cavity. The present study was conducted to determine cases of ectopic pregnancy reported to emergency department. **Materials & Methods:** This study was conducted on 56 females reported to the department. Findings such as clinical features, risk factors and management of cases were recorded. **Results:** Age group18-21 years had 6 cases, 22-25 years had 14 and 26-30 years had 36 cases. The difference was significant (P< 0.05). Risk factors were Cu T in 3, abortion in 4, infertility in 1 and tubal ligation in 2 cases. Clinical features were pain abdomen in 45, bleeding in 32, nausea in 48, syncope in 11, tachycardia in 14, shock in 10 and cervical movement in 33 cases. Emergency laparotomy was seen in 7, surgical laparoscopy in 12, laparotomy in 27 and laparoscopy converted to laparotomy in 10 cases. The difference was significant (P< 0.05). **Conclusion:** Ectopic pregnancy is not uncommon nowadays. Risk factors are Cu T, abortion, infertility and tubal ligation.
**Key words:** Ectopic pregnancy, infertility, Laparotomy.

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### INTRODUCTION

Ectopic pregnancy is implantation of fertilized ovum any site other than uterine cavity. Fallopian tube is the commonest site. Ectopic pregnancy remains the leading cause of maternal death in early pregnancy. The associated risk factors are pelvic inflammatory disease, previous history of ectopic pregnancy, tubal ligation, intrauterine contraceptive devices, sexually transmitted diseases, infertility, ART. There is considerable regional variation in its incidence and globally, Worldwide, ectopic pregnancy complicates 0.25-2.0% of all pregnancies. Its incidence is increasing and has been risen from 4.9/1000 pregnancies in 1970 to 9.6/1000 pregnancies.[1]

In the developed world, between 1% and 2% of all reported pregnancies are ectopic pregnancies (comparable to the incidence of spontaneous twin pregnancy).[2] The incidence is thought to be higher in developing countries, but specific numbers are unknown. Although the incidence in the developed world has remained relatively static in recent years, between 1972 and 1992 there was an estimated six-fold rise in the incidence of ectopic pregnancy.[3] This increase was attributed to three factors: an increase in risk factors such as pelvic inflammatory disease and smoking in women of reproductive age, the increased use of assisted reproductive technology (ART) and increased awareness of the condition, facilitated by the development of specialized early pregnancy units (EPUs).[4] The present study was conducted to determine cases of ectopic pregnancy reported to emergency department.

## MATERIALS & METHODS

This study included 56 females reported to the department in last 2 years. All were informed regarding the study and written consent was obtained. Ethical clearance was obtained before starting the study.

General information such as name, age, etc was retrieved from departmental register. Findings such as clinical features, risk factors and management of cases were recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

## RESULTS

**Table I Age wise distribution of cases**

| Age group (Years) | Number | P value |
|---|---|---|
| 18-21 | 6 | 0.01 |
| 22-25 | 14 | |
| 26-30 | 36 | |

Table I shows that age group18-21 years had 6 cases, 22-25 years had 14 and 26-30 years had 36 cases. The difference was significant (P< 0.05).

**Table II Risk factors in patients**

| Risk factors | Number | P value |
|---|---|---|
| Cu T | 3 | 0.02 |
| Abortion | 4 | |
| Infertility | 1 | |
| Tubal ligation | 2 | |

Table II, graph I shows that risk factors were Cu T in 3, abortion in 4, infertility in 1 and tubal ligation in 2 cases. The difference was significant (P< 0.05).

**Graph I Risk factors in patients**

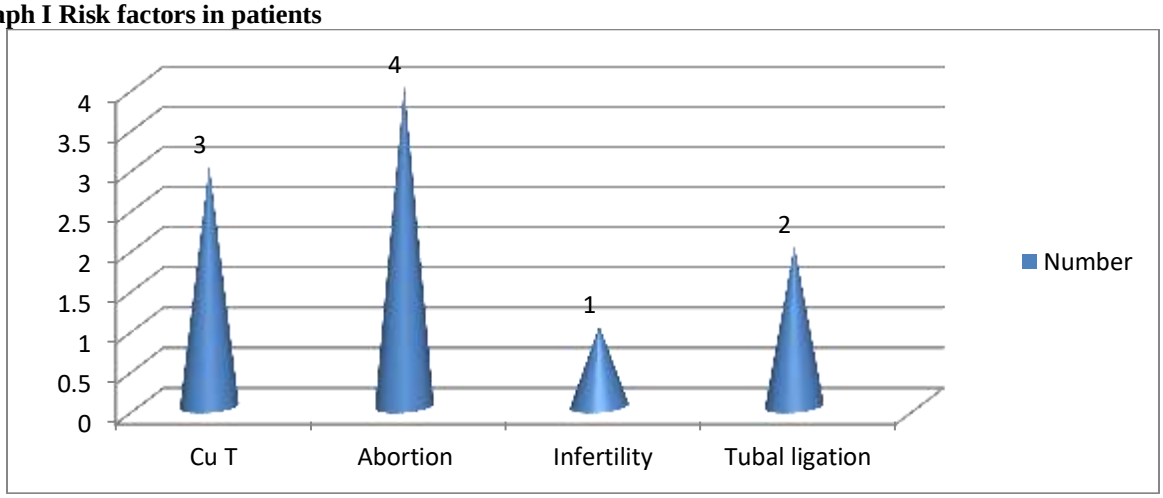



**Table III Clinical features in patients**

| Clinical features | Number | P value |
|---|---|---|
| Pain abdomen | 45 | 0.02 |
| Bleeding | 32 | |
| Nausea | 48 | |
| Syncope | 11 | |
| Tachycardia | 14 | |
| Shock | 10 | |
| Cervical movement | 33 | |

Table III, graph II shows that clinical features were pain abdomen in 45, bleeding in 32, nausea in 48, syncope in 11, tachycardia in 14, shock in 10 and cervical movement in 33 cases. The difference was significant (P< 0.05).

**Graph II Clinical features in patients**

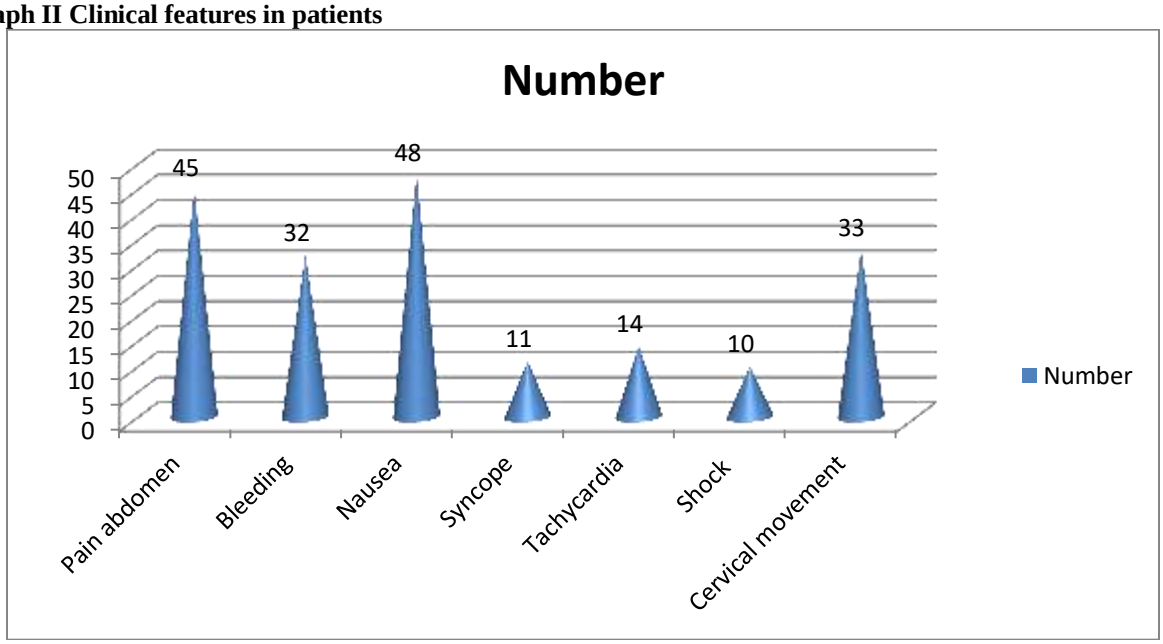
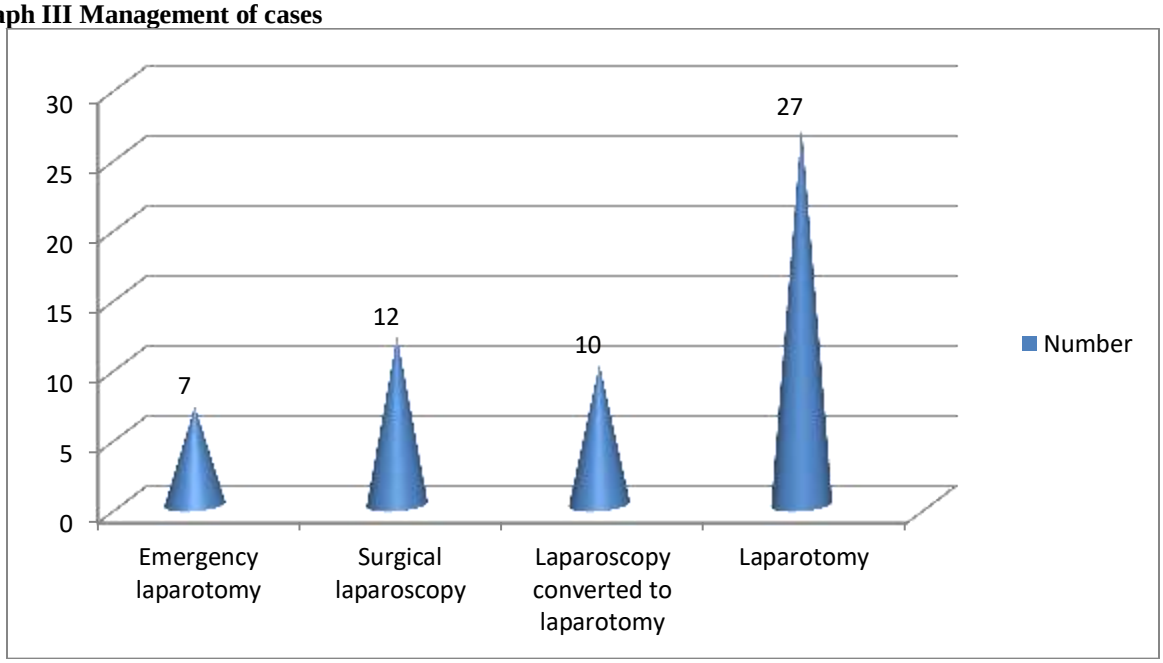



**Table IV Management of cases**

| Management | Number | P value |
|---|---|---|
| Emergency laparotomy | 7 | 0.05 |
| Surgical laparoscopy | 12 | |
| Laparoscopy converted to laparotomy | 10 | |
| Laparotomy | 27 | |

Table IV, graph III shows that emergency laparotomy was seen in 7, surgical laparoscopy in 12, laparotomy in 27 and laparoscopy converted to laparotomy in 10 cases. The difference was significant (P< 0.05).

**Graph III Management of cases**



## DISCUSSION

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 a knowledge of the associated risk factors helps identify women at higher risk in order to facilitate early and more accurate diagnosis.[5] Most risk factors are associated with risks of prior damage to the Fallopian tube. These factors include any previous pelvic or abdominal surgery, and pelvic infection.[6] Chlamydia trachomatis has been linked to 30-50% of all ectopic pregnancies. The exact mechanism of this association is not known but it has been proposed that in addition to distortion of tubal architecture, it may to be due to an effect on the tubal microenvironment.[7] The present study was conducted to determine cases of ectopic pregnancy reported to emergency department.

In this study, age group18-21 years had 6 cases, 22-25 years had 14 and 26-30 years had 36 cases. Risk factors were Cu T in 3, abortion in 4, infertility in 1 and tubal ligation in 2 cases. Gaddagi et al[8] found that the incidence of ectopic pregnancy was 0.97 %, mainly affecting young multiparous women, out of 36 cases 15 (41.7%) patients had risk factors previous abortion was commonest (19.4%), followed by history of infertility, tubal ligation, ectopic pregnancy, Cu T insertion. Acute abdominal pain was the commonest (94.4%) symptom 2/3 patients had tachycardia and abdominal tenderness, 10 were in shock. mild to moderate anemia present, while 17 % severely anemic, urine pregnancy test was positive in all. 5 hemodynamically stable patients given single dose intramuscular methotrexate, surgical intervention in 31 cases by either laparoscopy or laparotomy, laparoscopy in 4 patients, 1 had to be converted to laparotomy. Fallopian tubes were commonest site; Ampulla was the commonest site in tubal rupture.

Patients with an ectopic pregnancy commonly present with pain and vaginal bleeding between 6 and 10 weeks' gestation. However, these are common symptoms in early pregnancy, with one third of women experiencing some pain and/or bleeding. The pain can be persistent and severe and is often unilateral. However unilateral pain is not always indicative of ectopic pregnancy as, in early pregnancy, a prominent painful ovarian corpus luteum cyst is common. We found that clinical features were pain abdomen in 45, bleeding in 32, nausea in 48, syncope in 11, tachycardia in 14, shock in 10 and cervical movement in 33 cases. Emergency laparotomy was seen in 7, surgical laparoscopy in 12, laparotomy in 27 and laparoscopy converted to laparotomy in 10 cases. Olofsson et al[9] reported history of previous abortion/ dilatation and curettage (D and C) in 16 %, the relationship between prior abortions and ectopic pregnancy is explained by the post-abortal infections leading to tubal damage.

Diagnosis of ectopic pregnancy has improved significantly due to advances in ultrasound technology, rapid and sensitive serum hormone assays, the development of EPUs and an increased awareness and understanding of the associated risk factors. Despite this, around half of the women with an eventual diagnosis of ectopic pregnancy are not diagnosed at their first presentation.[10] Early diagnosis reduces the risk of tubal rupture and allows more conservative medical treatments to be employed.

## CONCLUSIONS

Ectopic pregnancy is not uncommon nowadays. Risk factors are Cu T, abortion, infertility and tubal ligation.

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