

## A RETROSPECTIVE STUDY ON ECTOPIC PREGNANCY

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### Abstract

**Introduction:** An ectopic pregnancy is one in which the fertilized ovum is implanted & develops outside the normal endometrial cavity. Nearly 95% of ectopic pregnancies are implanted in the various segments of the fallopian tube. The ampulla is the most frequent site followed by isthmic, fimbrial & interstitial tubal pregnancies. The remaining 5% of nontubal ectopic pregnancies implant in the ovary, peritoneal cavity, cervix, or prior cesarean scar.

**Materials and Methods:** A Retrospective study was conducted at Department of Obstetrics & Gynaecology, Government General Hospital Kurnool, during the period of January 2022 to June 2022. The case records of patients diagnosed with ectopic pregnancy were collected through the labour room registers & operation theatre registers. Information regarding the total number of ectopic pregnancies in the study period, clinical symptoms & signs, diagnostic tools used, treatment, risk factors for the ectopic pregnancy & associated mortality & morbidity were obtained.

**Results:** During the study period of 6 months, there were 4596 deliveries in our hospital & 43 were diagnosed as ectopic pregnancy giving the incidence of 0.93%. A majority of the patients belonged to the group of 20-30 years ie., 51.1%. In our study, 65.2% were multigravida & 34.8% were primigravida. In our study, 85.2% had abdominal pain, followed by history of amenorrhea in 81.6%, history of bleeding per vaginum in 80.1%, & asymptomatic in 9.1%. UPT was positive in 96.8% of cases & USG revealed ruptured ectopic pregnancy in 88.3% of cases, unruptured in 11.6 % of cases.

**Conclusion:** The incidence of ectopic pregnancies are on the rise. Through recent trend of management was conservative, surgical therapy & medical management but salpingectomy was treatment modality in the study. This was mainly because majority of the cases were referred or came late the hospital after the ectopic pregnancy was ruptured.

**Key Words:** Ectopic pregnancy, endometrial cavity, multigravida, amenorrhea.

### INTRODUCTION

An ectopic pregnancy is one in which the fertilized ovum is implanted & develops outside the normal endometrial cavity. Nearly 95% of ectopic pregnancies are implanted in the various segments of the fallopian tube.<sup>1</sup> The ampulla is the most frequent site followed by isthmic, fimbrial & interstitial tubal pregnancies. The remaining 5% of nontubal ectopic pregnancies implant in the ovary, peritoneal cavity, cervix, or prior cesarean scar.<sup>2</sup>

Risk factors like previous ectopic pregnancies, tubal corrective surgery, tubal sterilization, intrauterine devices, tubal pathology, infertility, assisted reproductive techniques, PID, smoking, prior abortions, multiple sexual partners and prior delivery have been implicated in the development of the ectopic pregnancy.<sup>3</sup>

Outcomes of ectopic pregnancy include tubal rupture, tubal abortion or pregnancy failure with resolution. With rupture, the invading expanding conceptus & associated hemorrhage can tear rents in the fallopian tube.<sup>4</sup> The key to a successful outcome is an early diagnosis of ectopic pregnancy. With routine ultrasonic scanning in early pregnancy, unruptured ectopic pregnancy can be detected before the clinical features develop.<sup>5</sup> Early diagnosis reduce the risk of tubal rupture and allows more conservative medical treatments to be employed.

### AIMS & OBJECTIVES

This retrospective analysis was done to determine the incidence, clinical features, risk factors, treatment & mortality & morbidity associated with ectopic pregnancies in a tertiary care hospital.

### MATERIALS AND METHODS

**Study design:** A Retrospective study.

**Study duration:** January 2022 to June 2022.

**Study Location:** Department of Obstetrics & Gynaecology, Government General Hospital Kurnool, during the period of January 2022 to June 2022.

**Sample Size:** 43 patients.

This Retrospective study was conducted in the Department of Obstetrics & Gynaecology, Government General Hospital Kurnool, during the period of January 2022 to June 2022. The case records of patients diagnosed with ectopic pregnancy were collected through the labour room registers & operation theatre registers. Information regarding the total number of ectopic pregnancies in the study period, clinical symptoms & signs, diagnostic tools used, treatment, risk factors for the ectopic pregnancy & associated mortality & morbidity were obtained.

### RESULTS

During the study period of 6 months, there were 4596 deliveries in our hospital & 43 were diagnosed as ectopic pregnancy giving the incidence of 0.93%. A majority of the patients belonged to the group of 20-30 years ie., 51.1%.

AGE	NUMBER	PERCENTAGE
<20	5	11.6%
20-25 years	22	51.1%
25-30 years	12	27.9%
>35 years	4	9.3%

**Table 1: Patient demographics**

In our study, 65.2% were multigravida & 34.8% were primigravida.

GRAVIDA	NUMBER	PERCENTAGE
primi	15	34.8%
2 <sup>nd</sup>	10	23.2%
3 <sup>rd</sup>	11	25.5%
>3	6	13.9%

**Table 2: Gravida****CLINICAL PRESENTATION:**

In our study, 85.2% had abdominal pain, followed by history of amenorrhea in 81.6%, history of bleeding per vaginum in 80.1%, & asymptomatic in 9.1%. UPT was positive in 96.8% of cases & USG revealed ruptured ectopic pregnancy in 88.3% of cases, unruptured in 11.6% of cases

	NUMBER	PERCENTAGE
Ruptured	38	88.3%
Unruptured	5	11.6%

**Table 3: Clinical Presentation**

Risk factors include pelvic infection in most of our cases i.e., 55.8% followed by previous tubal surgeries like tubectomy in 16.2%, infertility in 11.6% of cases.

RISK FACTORS	NUMBER	PERCENTAGE
History of PID	24	55.8%
History of tubectomy	7	16.27%
History of infertility	5	11.6%
History of previous ectopic	0	0

**Table 4: Risk Factors**

In 95.4% of cases ectopic pregnancy was tubal and it was more common in right side. A majority of the cases were ampullary pregnancy i.e., 53.48% followed by fimbrial in 23.2% cases, cornual in 16.27% cases, isthmic in 6.97% cases & ovarian in 4.6% of cases.

Site of Ectopic	Percentage	Number
Ampulla	53.48%	23
Fimbrial	23.2%	10
Cornual	16.27%	7
Isthmic	6.97%	3
Ovarian	4.6%	2

**Table 5: Site of Ectopic pregnancy**

The most common procedure which was done was unilateral salpingectomy in 86.04% of cases, followed by salpingo oophorectomy in 13.9% of cases, fimbriectomy in 6.97% of cases.

SURGERY	NUMBER	PERCENTAGE
Unilateral salpingoectomy	37	86.04%
Salpingo oophorectomy	6	13.9%
Fimbriectomy	3	6.97%

**Table 6: Surgical procedure**

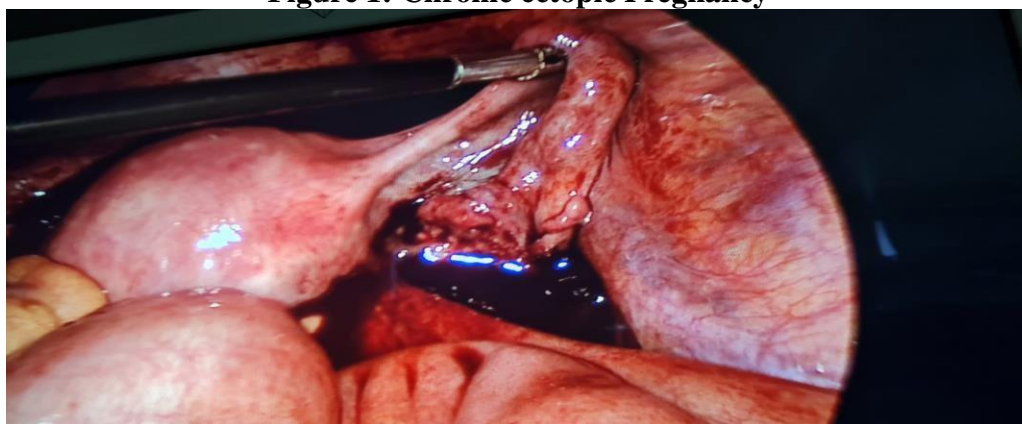
Morbidity included was blood transfusion in 79.4% of cases, wound complications in 5% of cases, mortality include 4.32% of cases.

Blood transfusion	34	79.4%
Wound complication	2	5%
Mortality	2	4.32%

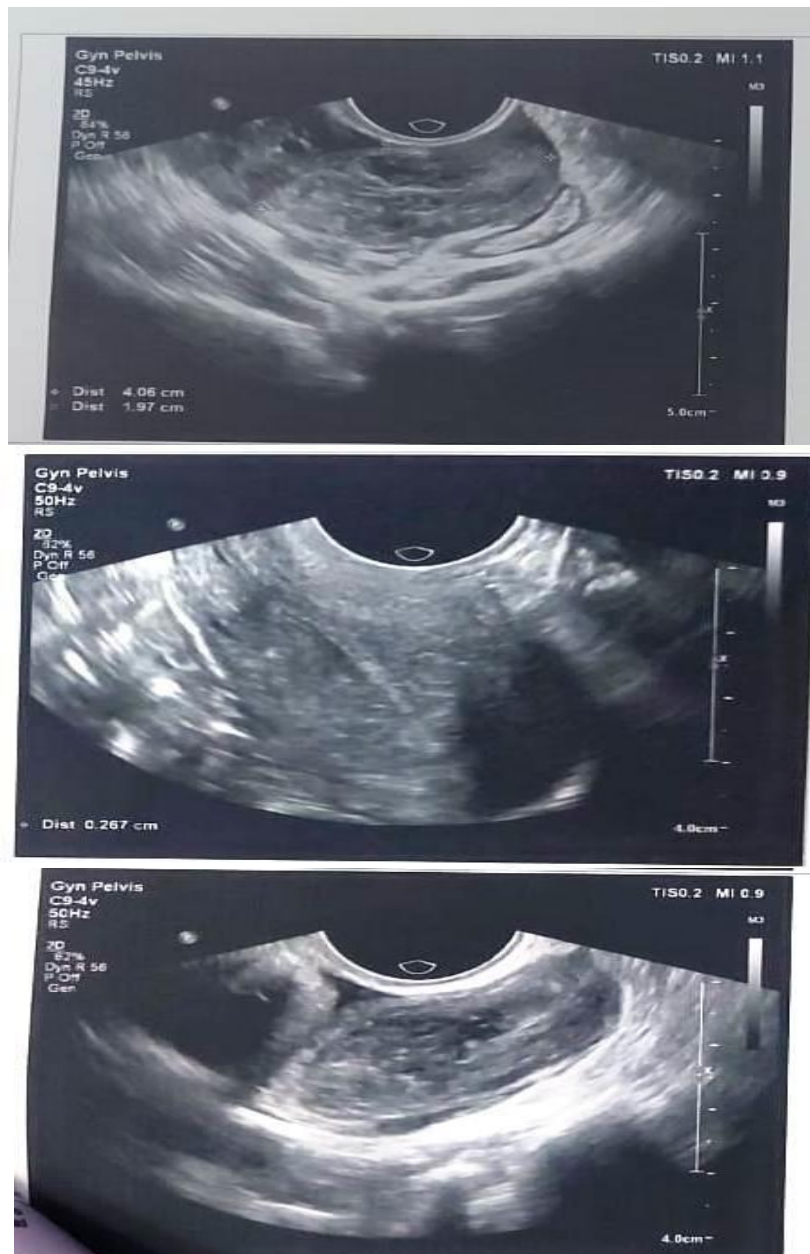
**Table 7: Blood transfusion, Wound complication, Mortality**



**Figure 1: Chronic ectopic Pregnancy**



**Figure 2: Tubal abortion**



**Figure 3: Transvaginal ultrasound showing tubal abortion**

## DISCUSSION

The incidence of ectopic pregnancy has increased since last 20 years. The incidence in this study was 9.3% for 1000 deliveries.

In our study, majority of women belongs to age group of 20-25 years with 51.1%. Higher incidence of ectopic pregnancy in this age group because as this corresponds to the age of peak sexual activity & reproduction.<sup>6</sup>

Majority of women with ectopic pregnancy were multigravida i.e., 65.2%. This high incidence is because of PID, pelvic infections resulting in tubal damage. In the study, incidence of PID was 55.8% cases. Endosalpingitis damages the mucosa and may entrap the migrating embryo, leading to ectopic implantation.<sup>7</sup>

In our study, 11.6% of women with ectopic pregnancies were infertile. This is because of the association between infertility & pelvic infections.

16.2% of the women with ectopic pregnancy had previous tubal surgeries like tubectomy. This incidence is because of improper surgical technique & formation of peritubal fistulas may result in ectopic pregnancy.<sup>8</sup>

UPT was positive in 96.8% of cases.

The commonest presentation of ectopic pregnancy in the study was abdominal pain, amenorrhea followed by vaginal bleeding. On examination, signs included were abdominal distension, cervical motion tenderness, adnexal tenderness & forniceal fullness.<sup>9</sup> Ultrasonography is the initial investigation for symptomatic women. When the results are indeterminate serum beta HCG levels should be measured. Serial measurements of beta HCG levels were considered when the diagnosis remains uncertain & when the patient was planned for medical conservative treatment.<sup>10</sup>

The commonest site of location of ectopic pregnancy was the ampulla of the fallopian tube. This is because of increased thickness & distensibility of fallopian tube at ampullary region.<sup>11</sup> Right sided ectopic pregnancy was present in 69% of cases & ruptured ectopic pregnancy was present in 88.3% of cases & unruptured ectopic & tubal abortion was 11.6%.<sup>12</sup>

In unruptured tubal ectopic pregnancy, medical therapy was indicated, when patient was hemodynamically stable.<sup>13</sup> But medical management requires close supervision of patient's general condition, serial beta HCG levels, serial USG monitoring of size of ectopic or status of rupture of ectopic pregnancy. As patients did not fit into the criteria for medical management and were referred after rupture, surgical management was done.<sup>14</sup>

But laparoscopy and medical therapy have now emerged as the widely used therapeutic modalities with great success in terms of reduced mortality & morbidity, shorter hospital stay, conservation of fertility.

## CONCLUSION

By this study, the incidence of ectopic pregnancies are on the rise. Through recent trend of management was conservative, surgical therapy & medical management but salpingectomy was treatment modality in the study. This was mainly because majority of the cases were referred or came late the hospital after the ectopic pregnancy was ruptured.

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