



## STUDY OF TUBAL ECTOPIC PREGNANCY AT TERTIARY TEACHING CARE HOSPITAL

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**Background:** During past two decades, the incidence of ectopic pregnancy has been increased worldwide dramatically. Among this tubal ectopic pregnancy is the most common. The present study was carried out with aims to highlight demographic and clinical profile of tubal ectopic pregnancy and their management and outcome. Detail history, clinical examination, biochemical investigations and radiological evaluation were carried out in each patient for confirmation of diagnosis and their management.

**Methods:** A prospective study of 60 cases of ectopic pregnancy was carried out from January 2018 to June 2019 at obstetrics and gynecology department at tertiary teaching care hospital. In present study demographic data like age, parity, risk factors and diagnostic method of management were noted from case records.

**Results:** Out of 60 patients, (72%) patients were between the age group of 21-30yrs.(30%) patients was nulliparous. Two common risk factors were: previous abortion (25%) and pelvic inflammatory disease (27 %). In present study common presenting symptoms were acute abdominal pain (88%), amenorrhoea (77%), vaginal bleeding (59%). In majority of patients common signs were tenderness over the abdomen (79%) and the fornices (56%). In tubal ectopic pregnancy, the most common site was ampulla of fallopian tube (53%). Haemodynamically stable (12%) patients having unruptured ectopic pregnancy were managed with multidose MTX therapy and rest (88%) patients were managed by surgical intervention.

**Conclusion:** Early identification of risk factors and timely interventions will reduce maternal morbidity associated with ectopic pregnancy. Ectopic pregnancy is a condition that can be managed conservatively or surgically. In spite of availability of early diagnostic tools, most of our patient needs surgical intervention as they were reported late to the hospital.

**KEYWORDS :** Methotrexate (MTX), laparoscopic management, Laprotomy management- Salpingostomy, pelvic inflammatory disease, previous abortion.

**1.INTRODUCTION:**

Ectopic pregnancy is the term applied to pregnancy where fertilized ovum implanted at the site other than endometrial lining of normal uterine cavity [1, 2]. Ectopic pregnancy is one of the most common acute abdominal emergencies that a gynecologist has met in their day to day practice. Ectopic pregnancy is a disease of diagnostic surprises as Novak says, "The physician who has Ectopic pregnancy on brain will rarely fail to make the diagnosis when it exists and he will diagnose it often when it is not present [1]." Dramatic rise in cases of sexually transmitted infection, increased use of intrauterine devices for contraception and use of assisted reproductive technologies are responsible factors for ectopic pregnancy. Maternal morbidity has been greatly reduced because of early diagnosis, recent modality of surgical techniques, anesthesia, availability of blood and broad spectrum antibiotics.

According to the site of ectopic pregnancy it is divided into 5 major type's 1.tubal pregnancy: Ampulla is most common site followed by isthmus, infundibulum and interstitial.2.ovarian pregnancy.3. Abdominal pregnancy.4.cervical pregnancy.5.other site like rudimentary horn, intra ligamentous.

Diagnosis of ectopic pregnancy can be made with proper symptoms, clinical examination, biochemical investigations (beta hCG), Transvaginal ultrasound and Laparoscopy also.

Clinical presentation with symptoms like abdominal pain, amenorrhoea, vaginal bleeding, fainting and syncopal attacks, signs of shock [11].

Per abdominal examination: abdomen tense and tender, guarding rigidity rare. Per speculum examination dark brown discharge may present. Bimanual examination: tenderness on fornix, mass or fullness in fornix, uterus normal or slightly bulky size [2, 11].

Management of ruptured ectopic pregnancy includes treatment of shock with iv fluids, blood transfusion or plasma expanders and immediate Laprotomy where Salpingostomy or salpingectomy are options. Whereas non surgical management includes 1.Expectant observation in case where low beta hCG, falling beta hCG titer <1000IU/L & falls at least 15% in first 24 hrs, haemoperitoneum <50 ml with hemosalpinx <2cm, no evidence of rupture, ectopic mass

<4cm 2.medical management MTX is also an alternative option. When patient haemodynamically stable, unruptured mass <4cm, no fetal cardiac activity, beta HCG <1000IU/L, no contraindication to MTX[2].

**1. Aims & objective**

1) The objective of present study is to identify incidence, underlying risk factors, role of various diagnostic method and outcome of ectopic pregnancy.

2) To reduce morbidity and to preserve future fertility.

**2. Material and Methods**

A prospective study of 60 cases of ectopic pregnancy was carried out from January 2018 to June 2019 at obstetrics and gynecology department of our institution.

In present study demographic data like age, parity, risk factors, method of management were noted from case records and all the data were tabular analyzed.

**3. Observation and Discussion****Table 1 Age & Parity Distribution of Patients**

Age group (yrs)	Parity					Total	Percentage (%)	Rose et al(2002)
	0	1	2	3	4+			
<20	03	01	-	-	-	04	07%	30
21-30	12	15	11	04	01	43	72%	43
>31	03	03	04	02	01	13	17%	27
Total	18	19	15	06	02	60	100%	100%
Percentage (%)	30%	32%	25%	10%	03%	100%		
Rose et al(2002)	0%	24%	32%	18%	22%	100%		

In Present Study, (72%) patients were between the age group of 21-30yrs. According to Rose study(2002) (43%) patients were between age group of 21-30yrs[7]. The higher incidence in this age group was due to maximum fertility during 21-30yrs of reproductive age.

In the present study, the maximum incidence of ectopic occurred between 0 to 2 parity, Munro Kerr and Eastman are of the opinion that there is no specific relation between parity and ectopic[12]. But in the

study by Rose et al, as parity increases there is decrease in incidence of ectopic pregnancy[7]. According to ICMR Multicentric Case Control Study (1990) of ectopic pregnancy, majority of women were young and had low parity [8].

**Table 2 Risk Factors Associated With Ectopic Pregnancy**

Risk Factors	NO. of Patients	Percentage (%)	Gharoro et al(2002)(%)
Pelvic inflammatory Disease	16	27	41
Previous abortion	15	25	63
History of Tubal ligation	03	05	2.6
History of infertility	12	20	02
IUCD insertion	03	05	-
Previous ectopic	01	02	02
Unexplained	10	17	-

Pelvic inflammatory disease was noted in (27%) , previous abortion (25%) and infertility (20%) are possible major predisposing factors after unexplained reasons. According to Rose et al(2002), Savitha Devi(2002) incidence of PID (42%) and (34%) respectively, previous abortion as a risk factor according to Rose et al.(2002) (26%), positive history of infertility according to Rose et al(2002) and Savitha Devi(2000) (15%) and (48%) respectively[7, 9]. Increased risk of ectopic pregnancy after abortion may be due to post abortal salpingitis and damage to cilia. IUCD increased risk of ectopic pregnancy due to actual PID.

**Table 3 Symptomatology of Ectopic Pregnancy**

Symptoms	No. of patients	Percentage (%)	Rose(2002)
Amenorrhoea	46	77%	79%
Pain abdomen	53	88%	92%
Bleeding	35	59%	67%
Other	16	27%	31%

The classical history of amenorrhoea, pain abdomen and vaginal bleeding were present in majority of cases. Acute pain in abdomen was the most common presenting feature in (88%) of the cases .Amenorrhoea was found in (77%) of cases .Vaginal bleeding of variable pattern was present in (59%) case.

**Table 4 Abdominal & Vaginal examination findings**

Abdominal Findings	No. of Patients	Percentage (%)	Rose et al(2002)
Tenderness	47	79%	84%
Guarding	09	15%	-
Distension	09	15%	49%
None	07	12%	-
Cervical movement tenderness present	34	56%	60%
Fullness in fornix and mass in fornix	30	50%	46%

In present study tenderness over the abdomen and in the fornices were the common signs in majority of patients. Tenderness found in (79%) of cases, guarding found in (15%) of cases, abdominal distension found in(15%) of cases, during per vaginal examination cervical movement tenderness found in (56%) of cases, fullness of fornix and mass in fornix found in (50%) of cases.

**Table 5 Tubal Site of Ectopic Pregnancy**

Tubal Site	NO. of Patients	Percentage (%)	Stromme et al(%)
Interstitial	07	11	1.41
Isthmus	09	16	11.42
Ampulla	32	53	70
Infundibulum	12	20	-

Among all the cases of tubal ectopic pregnancy ampulla was the commonest site (53%).

In present study, 46 cases were of ruptured ectopic pregnancy, because majority of cases were referred or they came late to the hospital after the ectopic pregnancy had ruptured.

**Table 6 Mode of Treatment**

Treatment	NO. Of Patients	Percentage (%)	Camini et al (%)
Medical treatment (MTX)	04	12	21
Laparoscopy	03	08	26
Laprotomy	52	87	54
Medical followed by surgical management	01	02	-

Haemodynamically stable patients (12%) having unruptured ectopic pregnancy and mass of ectopic gestation <4cm were treated with medical management with multidose MTX therapy and serial beta hCG monitoring. Few patients (2%) were initially managed by MTX but later on laprotomy performed due to rupture of ectopic mass & laparoscopy was performed in 8%cases.Emergency laprotomy was done in (87%) of patients who were presented with ruptured ectopic pregnancy and were haemodynamically unstable.

#### CONCLUSION:

Ectopic pregnancy remains the most lethal and morbid gynaecological emergency in child bearing age.

Early identification of underlying risk factors, timely diagnosis with the essential aids like transvaginal ultra sound and beta hCG and prompt intervention in the form of medical and surgical treatment will definitely help in reducing the morbidity associated with ectopic pregnancy &improve the future reproductive outcome.

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