

CLINICAL STUDY OF ECTOPIC PREGNANCYM. B. Swami¹, Parul Sharma², Manvi Tyagi³, Rinku Kuswaha⁴, Juhee Harit⁵**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: An ectopic pregnancy is one in which fertilized ovum is implanted at the site other than normal uterine cavity.^[1] Incidence of ectopic pregnancy is 1:160 deliveries.^[2] Clinical presentation is variable from acute to chronic type. Due to its varied clinical presentation ectopic pregnancy poses great diagnostic difficulty both to obstetrician, physician and surgeons.^[3] **OBJECTIVE:** To find out incidence in our study population and to evaluate symptomatically and clinical presentation in these patients. **MATERIALS AND METHODS:** Retrospective study of 34 ectopic pregnancies admitted and treated in Medical College hospital, Ujjain from 2010 to 2015 are included in the study. **RESULTS:** The incidence of ectopic pregnancy is more between the age group of 21-30years (73.52%) and in Multigravida 64.71%. Infertility and previous tubal surgery are the high risk factors for tubal pregnancy. Pain in abdomen was present in all 34 cases, amenorrhoea in 97.05% and bleeding per vagina in 76.47% cases. Syncopal attacks, vomiting were detected in 14.70% cases. Acute ectopic pregnancy was detected in 14.71% and chronic in 85.29% cases. 82.35% cases presented with adnexal mass, 79.41% with cervical motion tenderness, 50% with pallor, 32.35% with abdominal lump and tenderness and 11.76% with fullness in POD. **CONCLUSION:** Ectopic pregnancy is leading cause of maternal mortality in first trimester. In spite of advanced diagnostic techniques. It poses great diagnostic difficulties due to varied signs and symptoms. Previous tubal surgery pelvic inflammatory disease and infertility are the risk factors of tubal pregnancy.

KEYWORDS: Ectopic pregnancy, Salpingectomy, Ovarian pregnancy.

INTRODUCTION: Ectopic Pregnancy is one in which fertilised ovum gets implanted at the site other than normal uterine cavity.^[1] Tubal pregnancy is not synonymous but the most common type of ectopic pregnancy. Albucasis, the Arabian surgeon discovered the first case of ectopic pregnancy in year 963. Foetal bones were extruded from umbilicus in this case and was a case of secondary abdominal pregnancy. Incidence of ectopic pregnancies varies from place to place and it is more common in the area where there is more prevalence of STD's, genital tract TB and post abortal and puerperal sepsis.

Partial tubal block due to salpingitis, tubal surgery, abdominal surgery etc. is the single most important cause for tubal pregnancy. Clinically its presentation is variable from acute to chronic. Diagnosis of acute ectopic is easy but chronic ectopic presents differently in different patients, making pitfalls in diagnosis.

Thus due to disparity of its signs and symptoms, ectopic pregnancy has become interesting and challenging problem to the gynaecologist for timely diagnosis and intervention. With respect to the management of ectopic pregnancy, there have been tremendous technical advances. The early diagnosis and treatment of this condition over the past two decades has allowed a definitive medical management of unruptured ectopic pregnancies even before there were clinical symptoms in these high risk women.^[4,5]

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AIMS AND OBJECTIVES:

1. To find out the incidence of ectopic pregnancy in study population.
2. To evaluate symptomatology and clinical presentation of ectopic pregnancy and
3. To analyse morbidity and mortality occurring in these patients.

MATERIALS AND METHODS: This study is based on clinical diagnosis and management of Ectopic Pregnancy of patients who reported at CRGH, R.D. Gardi medical college, Ujjain, M.P. from Jan 2010 to Aug 2015. It is a retrospective analysis of 34 patients. During same periods there were 5449 deliveries giving the incidence of ectopic pregnancy 1 in 160 deliveries. All patients with history suggestive of ectopic pregnancy and in whom diagnosis was confirmed by clinical findings, ultrasound and direct visualisation at laparotomy are included in the study.

OBSERVATION AND ANALYSIS: Results are tabulated as below: N: 34.

Age group	Frequency	Percentage
<=20	5	14.70
21-25	15	44.11
26- 30	10	29.41
31-35	3	08.83
36-40	1	02.95

Table 1: Showing Incidence of Ectopic Pregnancy According to the Age

Gravidity	Frequency	Percentage
Primi	12	35.29
Multi	22	64.71

Table 2: Showing Incidence of Ectopic Pregnancy According to the Gravidity

Symptoms	Frequency	Percentage
Amenorrhea	33	97.05
Pain in abdomen	34	100
Bleeding p/v	26	76.47
Other associated symptoms	5	14.70

Table 3: Showing Percentage of various symptoms in Ectopic Pregnancy

Type of presentation	Frequency	% present study
Acute	5	14.71
Chronic	29	85.29

Table 4: Showing Percentage Acute and Chronic Ectopic Pregnancy.

Signs	Frequency	% in present study	% Tay et al. (2000)	% Rose et al. (2002)
Pallor	17	50.00	-	-
Abdominal lump	11	32.35	-	-

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Cervical motion tenderness	27	79.41	54	55.9
Adnexal mass	28	82.35	46.2	
Fullness in POD	4	11.76	-	-

Table 5: Showing Percentage of the different signs in Ectopic Pregnancy

Findings Tay et al. (2000) Rose et al. (2002) Present study Tenderness 91% 83.9% 70.3% Mass-16.2% Distention-49.5% 35.0% Cervical motion tenderness 54% 55.9% 75.7% Mass in fornices-46.2% 70.3%.

UPT	FREQUENCY	Percentage
POSITIVE	28	82.35
NEGATIVE	6	17.65

Table 6: Showing Percentage of UPT interpretation in Ectopic Pregnancy

USG finding	Frequency	Percentage
Right adnexal mass	22	64.70
Left adnexal mass	12	35.29
Empty uterus	34	100
Fluid in POD	7	20.58

Table 7: Showing the USG findings in Ectopic pregnancy

Laparotomy-fate of ectopic gestation in tubal pregnancy	Frequency	Percentage of present series
Tubal rupture	27	79.41
Tubal abortion	4	11.76
Unruptured	2	05.88

Table 8: Showing the Fate of Tubal Pregnancy

Site of ectopic gestation	Frequency	Percentage of present series	Preeti S Vyas	Ayesha Imran	Chow et al 1987	Rose et al 2002
Ampullary	24	70.58	47.50	75.51	79.6	56.90
Isthmic	7	20.58	25	14.28	12.30	39.78
Fimbrial	2	05.88	17.5	8.16	6.20	-
Ovarian	1	02.94	1.25	2.04	-	1.07

Table 9: Showing incidence of the Site of Ectopic Pregnancy

Type of modality of T/T	Frequency	Percentage
Medical	2	05.88
Surgical	30	88.24
Conservative surgery f/b/mTX	2	05.88

Table 10: Showing Incidence According to The Type of Treatment Modality

Blood transfusion	Frequency	Percentage
No transfusion given	14	41.17
Transfusion given	20	58.83

Table 11: Showing Incidence of The Blood Transfusion for Management

Amount of blood in peritoneal cavity	Frequency	Percentage
Nil	2	05.88
Upto 500ml	10	29.41
500-1000ml	17	50.00
1000-1500ml	2	05.88
More than 1500ml	3	08.83

Table 12: Showing Amount of Blood Loss in Ectopic Pregnancy

DISCUSSION: The maximum incidence in this series is between the age group of 21-30years (44.11%+29.41%=73.52%). The maximum age of patient is 36 years and minimum 19 years. The incidence of ectopic pregnancy decreases with increasing age. Rashmi et al conducted a study in which 70.2% cases belonged to the age group of 21-30 years.^[6]

The incidence of ectopic pregnancy in Multigravida is 64.71% and that of primigravida is 35.29%. the incidence in multigravida is high as they are more exposed to post abortal, puerperal infections and STD's. In the study conducted by Rashmi et al in June 2012, 60.2% cases were multigravida and rest were 37.8%.^[6]

In the present series 5(14.71%) cases were taking treatment for infertility and previous ectopic was found in 2.94% cases. 4 cases had undergone tubectomy in the past (11.76%) and in 2 cases tubal recanalization was done. this shows that Infertility and previous tubal surgery is the high risk factor for tubal pregnancy. in the study conducted by Rashmi et al in June 2012 there was history of tubectomy in 16.21% cases and 16.21% had history of infertility and previous ectopic pregnancy was found in 2.7%.^[6] in our study history of previous ectopic were in 2.94% cases.

In this study pain in abdomen was present in all 34 cases, followed by amenorrhea which was present in 97.05% cases and bleeding P/V in 76.47% cases. Other associated symptoms such as syncopal attacks, vomiting were detected in 14.70% cases. This shows that in ectopic pregnancy pain in abdomen, amenorrhea and bleeding P/V is most frequent symptom still absence of amenorrhea and bleeding P/V cannot rule out ectopic pregnancy. In study conducted by Rashmi et al in June 2012 amenorrhea in 77.5%, pain in abdomen in 89.2 %, bleeding p/v 42.3%.^[6]

In the present series acute ectopic pregnancy was detected in 14.71% and chronic in 85.29% cases showing chronic ectopic has a most common clinical presentation in ectopic pregnancy.

In present study 82.35% presented with adnexal mass, 79.41% with cervical motion tenderness, 76.47% had bleeding p/v, 50% with pallor, 32.35% with abdominal lump and tenderness and 11.76% with fullness in POD.

In 13 cases (38.23%) HGM % was found normal and in 21(61.76%) patients were anaemic, out of which 3(08.82%) were severely anaemic, 11(32.35%) had moderate anaemic and 7(20.58%) were mildly anaemic.

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82.35% had a positive Urine Pregnancy Test and 17.65% had negative reading. This shows that negative pregnancy test cannot rule out ectopic pregnancy. Rashmi et al conducted a study in 2012 June which stated UPT positive in 97.3% cases and 2.7% cases reported a negative UPT.

USG was performed in all cases. Adnexal mass and empty uterus was detected in all cases and fluid in POD was noted in 32(94.11%) cases. the classic findings of empty uterus, non-specific complex adnexal mass, fluid in POD are demonstrated in almost all cases when this classic finding along with positive urine pregnancy test is present, the diagnosis of chronic ectopic can be made accurately. Diagnosis of Intact tubal pregnancy can be made accurately from ultrasonographic findings by detecting G sac outside the uterine cavity. Rashmi et al study stated that 83.2% had adnexal mass as a ultrasonographic finding.^[6]

In the present series 33 cases were of tubal pregnancy and 1 of ovarian pregnancy. Out of 33 tubal pregnancy tubal rupture was seen in 27 cases (79.41%), tubal abortion in 4 cases (11.76%) and unruptured tubal pregnancy in (05.88%) cases. This shows tubal rupture is the most common fate of tubal pregnancy. In the study conducted by Rashmi et al June 2012 tubal rupture was found in 78.3% cases and unruptured in 8.1% cases.^[6] Wills and Mohmbi et al detected ruptured tubal pregnancy in 66% cases and unruptured in 34% cases.^[7]

24 (70.58%) cases had ampullary region tubal ectopic gestation, 7(20.58%) isthmic, 1(2.94%) infundibular, 1 (2.94%) fimbrial. this shows that ampullary region tubal ectopic is the most common site for tubal ectopic gestation.^[8]

30 cases (88.24%) underwent unilateral salpingectomy. 2(5.88%) cases were treated with methotrexate 1mg/kg of body weight and in 2(5.88%) cases milking was performed with post-operative methotrexate therapy.^[9] In the study conducted by Rashmi et al in June 2012 67.6% cases were treated by salpingectomy, 5.4% by milking for tubal abortion.^[10,11]

20(58.88%) of patients recovered with 2 units of blood transfusion. 2 cases 4units of blood transfusion. 50% patients had blood varying from 500-1000ml in the peritoneal cavity, 29% upto 500ml, 8.83% had blood loss of more 1500 ml.

CONCLUSION:

- 1) Ectopic pregnancy is the disaster of reproduction and inspite of modern diagnostic technologies it is the leading cause of maternal mortality in the first trimester of pregnancy.
- 2) Previous ectopic, abdominal and tubal surgeries are the risk factors for tubal pregnancy.
- 3) One should be vigilant to rule out ectopic pregnancy in all patients in reproductive age group complaining of pain in abdomen with or without history of amenorrhoea, and bleeding per vagina.
- 4) With the classic findings in USG of empty uterus, non-specific complex adnexal mass, fluid in POD along with positive urine pregnancy test, the diagnosis of chronic ectopic can be made accurately.
- 5) Un-ruptured tubal pregnancy with gestational sac diameter less than 4cm can be managed conservatively by medical therapy.
- 6) Salpingectomy is most common treatment for ruptured tubal pregnancy, but in patient who want to preserve reproductive function, can be treated by conservative tubal surgeries such as milking of tube and methotrexate therapy in selected cases.

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