# Original article:

# Analysis of fourty cases of ectopic pregnancies in tertiary care hospital in south India

### Shivakumar HC, Umashankar KM, Ramaraju HE

\*Corresponding author: DR Umashankar KM

Name of Institute: Department of OBGY, VIMS, BELLARY, INDIA

#### ABSTRACT:

**INTRODUCTION:** Early diagnosis of Ectopic pregnancy presents a challenging problem. It not only threatens the life of a women, if not diagnosed and treated timely but tells upon her fertility by causing mutilation of fallopian tube. The study was under taken to evaluate the incidence, causes, Clinical presentation, Diagnostic modalites and management of Ectopic Pregnancy in our VIMS Hospital, a Tertiary care centre, Bellary.

**METHODS**: Cases admitted as Ectopic Pregnancy at Department Of OBG, VIMS, BELLARY were clinically analysed, results are tabulated.

**RESULTS:** The incidence was 1 in 161. Of the symptoms, 95% had pain abdomen, 80 % had Amenorrhoea, 70% had Bleeding Per Vaginum, 30% had vomiting and 5% had urinary complaints. The most common site in present series was ampullary region. (52.77%). Most common type of Ectopic gestation was rupture (66.66%) observed at laparotomy.

**CONCLUSION**: Ectopic Pregnancies represent a leading cause of morbidity and mortality for women of reproductive age. The incidence of Ectopic Pregnancy is on the rise world wide for the past twenty five years. The etiologies of Ectopic Pregnancy are diverse. In addition to the disruption they cause at the time of their occurrence, they leave permanent sequelae,

**KEY-WORDS**: ectopic pregnancy, tertiary care hospital

## INTRODUCTION

Ectopic pregnancy is a fascinating clinical problem which has been approached from many angles. Early diagnosis of Ectopic pregnancy presents a challenging problem. It not only threatens the life of a woman, if not diagnosed and treated timely but tells upon her fertility by causing mutilation of fallopian tube. However there is no disorder in obstetrics and gynaecology which presents so many diagnostic pit falls and alleys. Majority of patients exhibit a wide variety of symptoms and mimick many other diseases affecting the abdominal organs.<sup>1, 2</sup> The increased ratio of extrauterine to intrauterine pregnancy is related to the rising incidence of sexually transmitted diseases,

efficacy of antibiotic therapy in preventing total tubal occlusion following an episode of salpingitis, delaying of age of marriage and child birth, Second generation intrauterine devices, progesterone only pills <sup>3,4</sup>The study was under taken to evaluate the incidence, causes, Clinical presentation, Diagnostic modalites and management of Ectopic Pregnancy..

### MATERIALS AND METHODS

The study was carried out for one and half year from November 2004 to April 2006. Cases admitted as Ectopic Pregnancy at Department Of OBG, VIMS, BELLARY were clinically studied. There were 40 cases of Ectopic Pregnancy of which 32 were acute and 8 cases were chronic cases. Here we discussed

the etiological factors involved and also the clinical features, presentation, diagnosis and management.

## **RESULTS**

The present study comprises of 40 cases of Ectopic Pregnancies during the study period of one & half

years from November 2004 to April 2006. in District Head Quarters Hospital and Medical College Hospital, Vijayanagar Institute of Medical Sciences, Bellary.

**Table 1 : Incidence in present series** 

Case	Number		
Total No of deliveries	6460		
No of Ectopic Pregnancy	40		
Incidence of Ectopic pregnancy in VIMS,			
BELLARY 1 in 161			

Table 2: The socio economic status of our patients

Socio economic status	Number of cases	Percentage
Low	30	75%
Middle	6	15 %
High	4	10%
TOTAL	40	100%

Table 3: The age incidence in the present series

Age in Years	No. of Cases	Percentage
15 – 20	4	10%
21 – 25	13	32.5%
26 – 30	15	37.5%
31 – 35	4	10%
36 – 40	2	5%
Above 40	2	5%
Total	40	100%

.

Table 4: The gravidity in present series

Gravidity	No. of Cases	Percentage
Primi	4	10%
Gravida 2	10	25%
Gravida 3	12	30%
Gravida 4	7	17.5%
Gravida 5	5	12.5%
Grand multi	2	5%
Total	40	100%

Table 5: Comparitive study of incidence of parity

Sl No.	Parity status	No. of Cases	Percentage
1.	Nullipara	10	25%
2.	Para one	11	27.5%
3.	Para two	10	25%
4.	Para three	3	7.5 %
5.	Para four	4	10 %
6.	Para five and above	2	5%
	Total	40	100%

Table 6: Duration of interval between active married life and present ectopic in 4 nulli parous women.

Duration of interval	No. of Cases	Percentage
1- 2years	1	25%
2-4 years	0	
5-8 years	2	50%
9-12 years	1	25 %
Total	4	100 %

Table 7: showing various risk factors for ectopic pregnancy in present series

Sl.No	Risk Factors	No of Cases	Percentage
1	INFERTILITY		
	A. Primary infertility	3	7.5%
	B. Secondary infertility	4	10%
2	H/O PID	10	25%
3	H/O CONTRACEPTIVE		
	1. STERILIZATION		
	A.Puerpural tubal ligation	4	10%
	B.Interval tubal ligation		
	C.Laproscopic tubal ligation	1	2.5%
	2. IUCD	2	5%
	3. ORAL PILLS		
	4. CURRENT USE OF	1	2.5 %
	CONTRACEPTIVES	1	2.5%
	A. Oral pills		
	B.IUCD		
		1	2.5%
		0	0
4	H/O Previous Surgery		
	A) .D&C	3	7.5%
	B). Caesarian Section	2	5%
	C).Appendicectomy	2	5%
	D). Salpingectomy	0	-
	E) .Tubal Recanalisation	0	-
5	Abortion	13	32.5%
	<b>Ectopic Pregnancy</b>	0	-
6	H/O Genital Tuberculosis	2	5%
7	No Risk FACTORS	14	35%

Table 8 : Symptomatology in the present study.

Sl No.	Symptom	No. of Cases	Percentage
1.	Pain abdomen	38	95%
2.	Amenorrhea	32	80%
3.	Bleeding PV	28	70%
4.	Nausea & vomiting	12	30%

5.	Urinary complaints	2	5%
6.	Fainting attacks	6	15%
7.	Fever	2	5%
8.	Rectal symptoms	-	-
9.	Shoulder pain	-	-

**Table 9: Incidence of signs in present series:** 

Sl No.	Sign	No. of Cases	Percentage
1.	Pallor	32	80%
2.	Shock	28	70%
3.	Abdominal tenderness	35	87.5%
4.	Rigidity & guarding	28	70%
5.	Abdominal distension	8	20%
6.	Mass per abdomen	2	5%
7.	Tenderness on movement cervix	20	50%
8.	Tenderness in fornices	30	75%
9.	Mass in fornix	16	40%

Table 10: Other pelvic pathology

Sl No	Type of pathology	No of cases	Percentage.
1	Adhesions	15	37.5%
2	Hydrosalphinx	3	7.5%
3	Haemato salpinx	2	5%

### **DISCUSSION**

During the past 25 years a world wide increase in incidence of Ectopic pregnancy has been reported.. In the present series our incidence 1 in 161 correlates with the incidence of . Priti S Vyasa which is 1 in 141. But it is more as compared with incidence of .Jabbar FA, 1 in 742 and Weekes LR i.e 1 in 195. This is due to recent trends in early diagnosis and treatment of Ectopic Pregnancy in recent years. But less as compared with the incidence Reported by Kouam L, i.e. 1 in 86 and Naila

Bangash 1 in 95. The present study is almost comparable to Priti<sup>4</sup> S Vyasa, and Poonam<sup>5</sup> Y, study reporting the maximum age incidence between 21-30 years, and average age of 27.90yrs. The study is in conformity with the observations made by Robert J Leke<sup>6</sup> . and .JabbarFA,

According to Poonam<sup>6</sup> study 51% of the Ectopic pregnancy had previous abortion Priti<sup>4</sup> reported 21% of the Ectopic pregnancy had previous abortion, Gharoro reported 62.5% of the Ectopic pregnancy had previous abortion.

Levin et al<sup>8</sup> (1982) reported that relative risk of ectopic pregnancy was 1.6 for women with one prior induced abortion and 4.0 for women with two-induced abortion.

In the present series only two cases (5%) had previous history of appendicectomy 4 months and 8 months back. Brenner has stressed that laparotomy for appendicectomy increases the risk of ectopic pregnancy especially on the right side. In the present series, however it was a left sided ectopic pregnancy Poonam<sup>6</sup>. reported an incidence of appendicectomy in 8%, Priti<sup>4</sup> reported 0.5%, Shah reported in 2% of the cases. In the present series three patients (7.5%) underwent D & C for infertility. According to Ascherman, intra uterine manipulations such as curettage, dilatation of cervix, Rubin's test, hysterosalpingography may in certain cases be responsible for causing subclinical inflame-mation.Curettage is sometimes followed by low grade infection hampering the migration of fertilized ovum.

Priti<sup>4</sup> has reported 5% of Ectopic pregnancies had previous history of D & C, Poonam<sup>6</sup> reported in 12% of the cases. In the present series 7 patients 17.5% underwent tubal ligation ranging from 2 to 10 years back. Two patient had laparoscopic sterilization. Among them one patient had tubal ligation 10 years back, had a year later laparotomy for PID. Massive tubal ligation programs has definitly increased the risk of pelvic inflammtory disease. Ectopic pregnancy should be strongly considered if a patient with previous history of tubal ligation develops signs and symptoms suggestive of ectopic gestation.IUCD and ectopic pregnancy. In the present series 1 patients (2.5%) gave history of using IUCD which was removed 6 months prior to the diagnosis of ectopic pregnancy. The increased use

of intra uterine devices as a method of contraception has resulted in the increased incidence of ectopic pregnancies, this is explained by the intra uterine protective effect of IUCD being against extra uterine pregnancy. IUCD does not offer any protection against ovarian pregnancy. In the present series two patients(5%)used OCP for 6 months and conceived while on OCPs and found to be Ectopic pregnancy. In the present series 95% of cases had pain abdomen. Pain was the most frequent and constant symptom and was complained of in all the cases. Pain abdomen before rupture is due to streching of the tube or peritubal adhesions. It gets worse when the bleeding begins. Actue pain is complained of when the tube ruptures. Later the pain is due to blood in the peritoneal cavity or due to mass in the pelvis which add to pain. The present study is in comparision with Shah's<sup>10</sup> study who reported pain abdomen in 97.3% of the cases. In the present series amenorrhoea was present in 80% Though amennorrhoea is an important symptom, absence of amenorrhoea doesnot rule out the possibility of ectopic gestation.priti<sup>5</sup> reported amenorrhoea in 78.57% Poonam<sup>6</sup> reported amenorrhoea in 84% of patients.

In the present series vomiting was reported in 30% which coincides with 28.4% reported by Shah et al. <sup>10</sup> In the present series pyrexia was present in 5% of cases. pyrexia may fall in acute hemorrhage, but in chronic cases, there may be sligt pyrexia due to absorption of blood clots. This pyrexia, may be intermittent upto 101 f as different from actue salpingitis where temperature is more than 101 subnormal temperature may be encountered because of pallor and shock. In our series maximum number of cases (90%)had tubal Pregnancy of these 50% were right sided and 50% were left sided. Chaser

moir belives that right and left tube involved approximately equally.

### CONCLUSION

Ectopic Pregnancies represent a leading cause of morbidity and mortality for women of reproductive age.

#### REFERENCES

- 1. Pisarka MD, Carson SA, Buster JE. Ectopic Pregnancy. Lancet 1998;351;1115- 1120.
- 2. Clausen I. Conservative versus radical surgery for tubal pregnancy. A review. Acta Obstet Gynecol Scand 1996;163 (4pt):1120-3.
- 3. Simms I, Rogers PA, Nicoll A. The influence of demographic change and cumulative risk of pelvic inflammatory disease on the change of ectopic pregnancy. Epidemiol Infect 1997;119:49-52.
- 4. Western L, Bengtsson LPH, Mardh P-A. Incidence, trends and risks of ectopic pregnancy in a population of women. BMJ 1981;282:15-18
- 5. Jeffcoate's Principles of Gynaecology. International edition, 5<sup>th</sup> Edition, Neerja, Bhatla, M.D.
- 6. Epidemiology, diagnosis and management of ectopic pregnancy, Dr. Priti s vyasa an analysis of 196 cases. http://www.bhj.org/journal/2000\_4203\_jul00/original\_458.htm
- 7. Ectopic pregnancy Two Years Review from BPKIHS, Nepal. Poonam, Upretty D, Banerjee-B. Kathmandu University Medical Journal (2005), Volume 3, No 4, Issue 12, 365-369.
- 8. Ectopic Pregnancy in Africa: a population based study. Robert J. Leke, MD, Nathalie Goyaux, PhD, Tomohiro Matsuda, PhD and Patrick F. Thonneaeu, MD. Volume 103, No 4, April 2004, ACOG.
- 9. Levin, et al, "Ectopic Pregnancy and Prior Induced abortion" American Journal of Public Health (1982), Volume 72, Page No 253.
- 10. Ectopic Pregnancy: Presentation and risk factors. Shah N, Khan NH; J Coll Physicians Surg Pak. 2005 Sep;15(9);535-8.

Date of submission: 02 October 2013

Date of Provisional acceptance: 26 October 2013

Date of Final acceptance: 25 November 2013

Date of Publication: 04 December 2013

Source of support: Nil; Conflict of Interest: Nil

Indian Journal of Basic and Applied Medical Research; December 2013: Vol.-3, Issue-1, P.235-241