

## CHANGING TRENDS IN THE RISK FACTORS IN ECTOPIC PREGNANCY (200 CASES)

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### SUMMARY

100 Cases of Ectopic pregnancy treated from 1975 to 1980 and 100 Cases between 1985-1988 in Govt.RSRM Hospital, Madras 13, were analysed. In 1975 Group 40% had STD, 30% PID, 10% long period of infertility, 60% MTP and 8% appendectomy 15%. Ectopic following tubectomy in 1975 Group was 5%. In 1985 group there were 13% following tubectomy, 15% following Laparoscopic sterilization and 5% following tubal reconstruction, 2% IUD users in 1985 group had Ectopic. This study shows that recent advances in fertility control, legalisation of abortions and decline in STD, PID rates and increase incidence of appendectomy in young girls have increased the risk of Ectopic Pregnancy.

### INTRODUCTION

Incidence of ectopic is on the increase and has become a major Public Health hazard. It still remains a dramatic Gynaecological emergency as well as persistent diagnostic challenge. The rise in incidence of ectopic, may be due to decline in STD and PID and increase in risk factors such as abortion, pills, IUD, Tubectomy, and Laparoscopic Sterilization. Thus more young women accepting

Surgical Contraception, for whom the failure of sterilization and reconstruction surgery on tubes for wanting a baby, and more young girls being subjected to appendectomy has increased the risk. Aim of this study is to compare the changing trends in the risk factors in 1975 and 1985 groups.

### MATERIAL AND METHODS

100 Cases treated in 5 Years from 1975-1980, and 100 cases treated in 3 Years from 1985-1988 in Govt.RSRM Hospital, Madras. 13, were analysed. History for PID, STD,

infertility treatment, Surgery on tubes, Pelvic Surgery MTP, Usage of IUD, and Pills were taken. Clinical, Culdocentesis, Laparoscopy, Ultrasonic and Laparotomy findings were noted. Laparotomy, Site and type of ectopic pregnancy, presence of appendix, adhesions, tuberculosis, Endometriosis and condition of opposite tube and ovaries were noted. The results in the two groups were compared.

## RESULTS AND ANALYSIS

1) CLINICAL PICTURE:- In our study, 60% cases reported with classical picture and regular periods, and 80% in Kamala Khera's(1988) Series. 30% of our cases reported with amenorrhoea and 10% were asymptomatic. Only 20% were admitted with shock. Melwyn D.Mello (1988) reported 67.8% amenorrhoea, and 32.2%

TABLE I  
PRESENTING FEATURES

Sl. No.	Findings	Percentage
1	Classical Symptoms	60%
2	Asymptomatic	10%
3	Regular Periods	60%
4	Amenorrhoea	30%
5	Abdominal Pain	90%
6	Painful Cervix	70%
7	To mass	30%
8	Shock	20%
9	STD	40%
10	PID	30%
11	TB	1%
12	Infertility	10%

\*Ectopic still remains a persistent diagnostic challenge because of atypical presentation of cases.

asymptomatic cases, Kamala Khera(1988) reported 63.64% amenorrhoea. In our study 90% reported with abdominal pain, 70% with tender cervix and 50% with tender mass which corresponds with Melwyn D.Mello and Kamala Khera's (1988) findings.(Table I)

DIAGNOSIS:- Similar to K.Buckshee (1989) and Melwyn D.Mello (1988) our clinical diagnosis was positive in 60% cases. Culdocentesis was positive in 90%, false positive in 3% and false negative in 7% cases. Melwyn D.Mello (1988) reported 82% culdocentesis positive, 3.5% false positive and 14.5% false negative. Our diagnostic accuracy was 92% with Sonar, where as with Kamal Buckshee 94%. (Table-II)

TABLE II  
DIAGNOSTIC ACCURACY

1) Clinical Diagnosis	:	60%
2) Culdocentesis	:	
1) Positive	:	90%
2) False Positive	:	3%
3) False Negative	:	7%
3) Ultra Sonar	:	92%

INCIDENCE:- In 1975- 1980, out of 62,308 deliveries, 100 Cases of ectopic pregnancy were treated. In 1985-1988 out 34183 deliveries 100 ectopics were treated. Incidence reported by various authors are Melwyn D.Mello (1988) 1:214, & Kamala Jayaraman (1989) 1:178.

AGE:- Average age group was 18-35 Years. Youngest was 18 Yrs, a primigravida who had appendectomy at the age of 12 Years. Oldest was 42 Years. She was taking ovulation induction drug Fertyl for long period of infertility.

PARITY:- In 1975 group maximum ectopic occurred in IIIrd para (35%). In 1985

group, 30% in para II, and 25% in Primi. Melwyn D. Mello, 18.2% in primi and 31.1% in para II.

**HISTORY:-** In 1975 group 40 gave history of STD, and Leucorrhoea where as in 1985 group only 5% had history of STD. Incidence of PID was 30% in Ist group and 8% in IInd group. History of Tuberculosis was 1% in each group. Melwyn D.Mello has reported 8% PID and Kamala Khera 63.5%. In 1975 group 10% had long period of infertility, treated with D & C and antibiotics. In 1985 group 15% had infertility out of which 4% were treated for PID, 3% were taking fertyl, and 8% tuboplasty for blocked tubes. Melwyn D.Mello has reported 7.5% infertility.(Table-III).

**TABLE III  
RISK FACTORS FROM HISTORY**

	1975-1980 (100 Cases)	1985-1988 (100 Cases)
1 STD	40%	5%
2 PID	30%	8%
3 MTP	6%	20%
4 Tuberculosis	1%	1%
5 Infertility	10%	15%
6 Tubal Ligation		13%
7 Tubal Recon- struction	Nil	5%
8 Laparoscopic- Sterilization	Nil	15%
9 Appendectomy	8%	15%
10 Ovariectomy	Nil	3%

\*Risk Factors STD, and PID have declined and tubal surgeries and appendectomy has increased in eighties

1) M T P :- 6% cases had MTP in 1975 group and 20% in 1985 group in our study. Melwyn D.Mello reported 7% MTP and

Kamala Khera 12.5%. 2% of our IUD Users in 1985 group had ectopic pregnancy, where as 6.6% of Melwyn D.Mello's and 5% Kamala Khera's IUD Users had ectopic pregnancy.

2) TUBAL SURGERY:- Ectopic following puerperal sterilization was 5% in 1975 group. In 1985 group 13% ectopic occurred following tubal sterilization, 15% following Laparoscopic Sterilization, 2% following tubal recanalisation and 3 following tuboplasty for blocked tubes. Melwyn D.Mello has reported 11.5% Suneeta Mittal (1982) 14.28% and Kamala Jayaraman 13.3% following tubectomy. Various contraceptives used are shown in Table-IV.

**TABLE IV  
CONTRACEPTION USED**

	1975-1980 (100 Cases)	1985-1988 (100 Cases)
1 MTP	60%	20%
2 IUD	Nil	2%
3 Tubectomy	Nil	15%
4 Laparoscopic Sterilization	Nil	15%

\*One of 100 cases from 1975 group 11% and in 1985 group 47% were using various contraceptive methods.

3) PELVIC SURGERY:- In 1975 group 8% had ectopic following appendectomy in childhood and 15% in 1985 group. Melwyn D.Mello reported 5% appendectomy Kamala Khera 3% and Kamala Jayaraman 8% .2 of our cases had laparotomy for ovarian tumour in their teen age.

4) RECURRENCE:- We had two cases in 1975 group. Both were cases of infertility with blocked tubes. In 1985 group we had 4 cases, out of which 2 had PID with blocked

tubes treated conservatively, one following tubectomy and one following tuboplasty, Melwyn D.Mello has reported 6% recurrence.

LAPAROTOMY FINDINGS:- Are shown in Table V A and B adhesions due to appendectomy was 8% in 1975 group and 15%

TABLE V - A  
LAPAROSCOPIC FINDINGS

SITE OF RUPTURE	Ruptured - 66%	
	Unruptured - 34%	
SITE OF RUPTURE	%	TYPE OF ECTOPIC
Isthmus	56%	Ruptured
Ampulla	34%	Tubal abortion
Fimbria	6%	Tubal Abortion
Cornua	3%	Ruptured
Ovary	1%	Ruptured

TABLE V - B  
PATHOLOGY OF TUBES

S. NO.	FININGS	1975-1980	1985-1988
1)	Tuberculosis	1%	1%
2)	Endometriosis	Nil	Nil
3)	Absent appendix with adhesions	8%	30%
4)	Adhesions due to PID	40%	25%
5)	CONDITION OF TUBES		
	1) Healthy	70%	60%
	2) Absent Opposite tube	2%	4%
	3) Inflamed thickened and tortuous tube	20%	8%
	4) Chronic ectopic pregnancy	2%	Nil
	5) P S Scar	5%	10%
	6) Rings	Nil	15%
	7) Scar on tubes due to tuboplasty	1%	3%

\* Common site of ruptured ectopic was right isthmus and tubal abortion, occurred in ampullary and fimbrial part. From table V-B it is found that there is an increase in tubal, surgery and Laparoscopic Sterilization.

in 1985 group. Melwyn D.Mello has reported 12% adhesions due to PID whereas we had 40% in 1975 group and 25% in 1985.

### CONCLUSION

Incidence of ectopic is on the rise thereby causing serious concern over maternal mortality. About 10-15 Years back, STD Leucorrhoea, puerperal and postabortal infections were considered to be important risk factors. Now, due to the invention of broad spectrum antibiotics, incidence of STD, and PID has declined. But more young women are subjected to various methods of fertility control like, pills IUD, tubal surgeries and MTP to limit their families. Modern drugs for induction of ovulation, and tubal reconstruction procedure, for women wanting to conceive after long period of infertility or those who already had undergone tubectomy or

