

## ECTOPIC PREGNANCY AND FERTILITY CONTROL

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### SUMMARY

The incidence of ectopic pregnancy in K.E.M. Hospital is 1:86 pregnancies. There were 65 cases of ectopic pregnancy. Only 17% of ectopic pregnancies were diagnosed in unruptured state. Salpingectomy was the commonest mode of management as most patients came in rather moribund condition and on an average two units of blood were required in the patients who presented with ruptured ectopic. 14 out of 65 cases (21.54%) had history of MTP, 6 had tubal sterilization and 4 had history of IUCD insertion. There is great importance of perfect asepsis during MTP and IUCD insertion procedures. An awareness of the possibility of ectopic pregnancy is necessary for early detection and management.

### Introduction

Ectopic pregnancy continues to be an important cause of 1st trimester maternal mortality. There is a steady increase in the incidence of ectopic pregnancy, and hence it has become a major public health problem. Are our fertility regulating methods responsible for this increased incidence?

The underlying predisposing factors causing ectopic pregnancy are pelvic inflammatory disease, of which some may be due to sexually transmitted diseases, the use of modern fertility regulation

methods, such as intrauterine contraceptive device, tubal sterilization and medical termination of pregnancy. In India, female sterilization is the commonest method of family limitation and CuT is accepted by majority of females as a spacing method. Our women being of younger age group, have a longer reproductive period, after they accept a particular method, and hence are more exposed to the risk of ectopic pregnancy.

The present study was conducted at KEM Hospital, Bombay. There were 65 cases of proved ectopic cases over a period of 24 months (July 1984 to June 1986). The incidence of ectopic pregnancy was 1 in 86 deliveries.

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**Material and Methods**

These sixty-five cases of proved ectopic pregnancy were analysed with respect to age, parity, type of ectopic, methods of diagnosis, mode of management, blood transfusions given and the mortality rate. Emphasis was laid on eliciting previous contraceptive history and history of medical termination of pregnancy.

**Results**

**TABLE - I**  
**AGE DISTRIBUTION**

Age in Years	No. of Cases	Percentage
15 - 19	2	3.08
20 - 24	17	26.15
25 - 29	23	35.38
30 - 34	17	24.62
35 - 39	7	10.77
40 and over	-	-
<b>Total</b>	<b>65</b>	

86.15% of patients were between 20-35 years.

**TABLE - II**  
**GRAVIDITY**

Gravida	No. of Cases	Percentage
Unmarried	3	4.62
1	15	23.08
2	15	23.08
3	15	23.08
4	10	15.38
5	6	9.23
6	1	1.54
<b>Total</b>	<b>65</b>	

66% of patients were gravide II, III and IV but there were 18 primi gravidas of which 3 were unmarried girls.

**TABLE - III**  
**TYPE OF ECTOPIC PREGNANCY**

Type	No. of Cases	Percentage
Tubal Rupture	39	60.00
Tubal Abortion	8	12.31
Unruptured	11	16.91
Chronic/leaking	2	3.08
Ovarian	2	3.08
Secondary abdominal	3	4.62
<b>Total</b>	<b>65</b>	

60% patients presented as tubal rupture. 17% could be diagnosed in unruptured state because of the availability of a laparoscope.

**TABLE - IV**  
**METHOD OF DIAGNOSIS**

Method	No. of Cases	Percentage
Laperoscopy	22	33.8
Colpo-puncture	27	41.5
Abdominal tap	3	4.6
Ultrasonography	3	4.6
Only Clinical	9	13.8

Colpo-puncture was the commonest diagnostic procedure, as laparoscope is available only during regular OT timings. Ultrasonography was used in only three patients as its availability is limited.

**Blood Transfusion**

Only 9 patients with unruptured ectopic did not require blood transfusion. Average 2 units of blood was given to the remaining patients.

60% patients were treated by Salpingectomy and 20 by Salpingoopherectomy. 14 patients had history of MTP, 6 had sterilization and 4 had used IUCD as seen in Table VI.



TABLE - V  
MODE OF MANAGEMENT

Mode	No. of Cases	Percentage
Salpingectomy	39	60
Salpingoophrectomy	13	20
Salpingotomy	10	15.5
Excision of Rudimentary Horn	1	1.5
Fetus removed (Sec. Abdominal)	2	3

TABLE - VI  
PREVIOUS HISTORY

M.T.P.	14 cases	21.54%
Tubectomy	6 cases	9.25%
IUCD	4 cases	6.15%

### Mortality

2 patients expired — both were secondary abdominal pregnancy. The death was because of haemorrhage and sepsis.

### Discussion

The incidence of ectopic pregnancy is rising significantly over a period of 2 decades. This is the period when the family planning movement started vigourously, targets were set, and many couples opted for modern family planning methods.

### Risk Factors

#### Age and Gravidity

The risk of ectopic pregnancy increases with age as reported by several authors. The higher incidence of ectopic pregnancy was found in 20-30 years. Our series also shows 86% patients between 20-35 years age group. Kohl et al (1976) reported increased incidence with age and gravidity. In our series also more than 50% were multigravidas.

#### IUD and Ectopic

Correlation between IUD and ectopic

pregnancy was noted by Ramkisson Chen and Kong (1966). It is presumed that IUD prevents an intrauterine pregnancy but does not prevent tubal or ovarian pregnancy. Also the subclinical pelvic inflammatory disease associated with the use of IUD, causes intratubal flimsy adhesions and traps the fertilized ovum. Sivin (1983) reported that inert and copper IUD do not run increased risk, but progesterone releasing IUD has significant risk. Berger (1980) showed that there is no difference in the incidence of ectopic pregnancy between IUD users and non-users, but when IUD users become pregnant they are at a higher risk of developing ectopic.

#### Tubal Ligation and Ectopic Pregnancy

Recent reports indicate the increasing ectopic pregnancy after sterilization procedure. The IFRP study reported 15 ectopic pregnancies in 23,600 sterilizations. All these were in electrocoagulation and none with band application.

#### Oral Contraceptives / Ectopic Pregnancy

As combination oral contraceptives prevent ovulation, there is no increased incidence of ectopic pregnancy but only progestogen pills (minipills) do not consistently prevent ovulation and hence the incidence of ectopic pregnancy is higher than in general population.

#### Induced Abortion and Ectopic Pregnancy

A relationship was found between the number of prior induced abortions and the risk of ectopic pregnancy. Levin et al (1982) reported that relative risk of ectopic pregnancy was 1.6 for women with 1 prior induced abortion and 40 for women with two induced abortions. Park and

Whang (1982) reported 61.3% women in 244 ectopic pregnancies had undergone previous induced abortions. Hogue et al (1982) reported increased incidence of ectopic pregnancy when abortion was complicated with infection or trauma. In our series 22% patients had undergone previous MTP.

#### ***In-vitro Fertilization/Embryo Transfer and Ectopic Pregnancy***

The first successful pregnancy achieved after IVF/ET in 1976 was reported by Stepto and Edwards. This was right sided tubal pregnancy. After this Smith et al (1982) reported tubal pregnancy after IVF/ET. Ovulation induction increases the risk of multiple ovulation and may increase the risk of simultaneous intrauterine and ectopic pregnancy. An IVF.ET Programme at KEM Hospital and IRR (ICMR) had 10 cases of intrauterine pregnancies with 2 full term deliveries and no case of ectopic pregnancy. (Personal Communication Prof. I.N. Hinduja, Dept. of Ob.Gyn. KEM Hospital dated 15/10/1987).

#### ***Conclusion***

This paper is not to discourage the use of family planning methods but to increase the awareness of associated problems, so that the family planning workers are conscious to prevent infection during

the procedures such as IUCD insertion and MTP and to look for early signs of infection and treat the same. An awareness of this problem amongst medical and paramedical personnel will allow early detection and timely treatment of this serious condition.

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