

ECTOPIC PREGNANCY AND FERTILITY CONTROL MEASURES

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SUMMARY

In a consecutive study of 120 documented cases of ectopic pregnancy (surgical diagnosis and confirmed by histopathological examination) 23 cases were following some form of fertility control measures, the incidence being 19.16%. The incidence following tubal sterilization was 10.83% (13 cases) and rest were following other measures like I.U.C.D., oral pills and even following M.T.P. Fertility control measures appears to have some relationship with increasing incidence of ectopic pregnancies in parous women and particularly in second para.

INTRODUCTION

Ectopic pregnancy is a pathological condition resulting from implantation of fertilized ovum at an aberrant site. Riolanus is credited with the first description of tubal pregnancy in 1604 but Mauriceau in 1669 actually recorded and reported the case for the first time.

Clinically, tubal pregnancy manifests variably varying from a case of acute abdomen and shock to that of a vague clinical entity. The underlying predispos-

ing factor responsible for causation of ectopic pregnancy is Pelvic inflammatory disease which may be due to sexually transmitted disease, use of (intra uterine contraceptive device) tubal sterilization and induced abortion. It is observed that the incidence of ectopic pregnancy has increased in women who have adopted one or the other form of family planning measures. In the present series an attempt is made to find out the relationship between ectopic pregnancy and family control measures.

MATERIAL AND METHODS

The study is conducted on patients admitted for ectopic pregnancy at State Zenana Hospital of S.M.S. Medical College, Jaipur from Feb. 1986 to July 1993. Out of 120 surgically diagnosed histo-pathologically confirmed cases, 23 cases were following some form of fertility control measures, the ratio being 5.21:1.

RESULTS

In the present study 96 (80%) cases belong to urban area as compared to 24 (20%) of rural area. In 54 (45%) cases the age range was between 20-25 years, in 43 (35.83%) between 26-30, in 18 (15%) between 31-35 and in 4 (3.33%) cases between 36 to 40 years. In one (0.83%) case the patient was only 19 years old.

The incidence of nullipara was 31 (25.83%), para I 27 (22.5%), Para II 38 (31.66%), para III 13 (10.83%), para IV 6 (5.0%), para V 3 (2.56%) and para VII

2 (1.66%). Para II form the highest incidence in the series.

Among 120 cases, 111 (92.50%) were the cases of tubal pregnancy, 2 (1.66%) of ovarian pregnancy, 2 (1.66%) of secondary abdominal pregnancy, one (0.83%) each of accessory horn right side, combined intauterine (Missed) with rup-

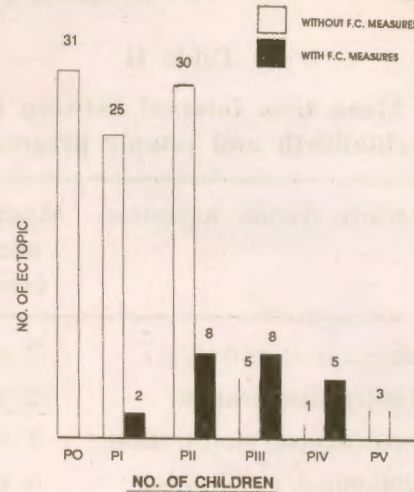


Fig. 1 : Reproductive performance

Table I

Type of ectopic

| Site of ectopic | Number | Percentage |
|---|--------|------------|
| Tubal | 111 | 92.50 |
| Ovarian | 2 | 1.66 |
| Secondary Abdominal | 2 | 1.66 |
| Accessory Horn | 1 | 0.83 |
| Combined intrauterine (missed) with rupture tubal pregnancy | 1 | 0.83 |
| Silent Rupture of right horn of ut bicorni unicollis | 1 | 0.83 |
| Rudimentary horn preg | 2 | 1.66 |
| Total | 120 | 100.00 |

Table II

Mean time interval between last childbirth and ectopic pregnancy

| Fertility control measures | Mean time interval between |
|--|----------------------------|
| Puerperal sterilization | 7 years |
| Minilap sterilization | 2 years |
| Laparoscopic sterilization | 3 years |
| Abdominal sterilization (conventional) | 6 years |
| Cu-T | 6 years |
| M.T.P. | 5 years |
| Oral pills | 5 years |

ture tubal pregnancy, silent rupture of right horn of uterus bicornius unicollis, and 2 (1.66%) of pregnancy in rudimentary horn of the uterus.

The duration between last child birth and the occurrence of ectopic pregnancy was upto one year in 8 cases (6.66%), 2 years in 28 (23.33%), 3 years in 13 (10.83%), 4 years in 6 (5.1%), 5 years in 7 (5.83%), 6 years in 2 (1.66%), 7 years in 3 (2.5%), 8 years in 8 (6.66%), 9 years in 6 (5%), 10 years in 3 (2.54%), 11 years in 4 (3.37%) and 15 years in 1 (0.83%).

As for the clinical features 68 (56.66%) came with the history of amenorrhoea and other associated symptoms. In 78 (65%) cases there was history of bleeding per vagina and 71 (59.16%) cases with history of pain in abdomen. The rest 14 (11.33%) cases came with other symptoms.

The duration of amenorrhoea was between 35 to 60 days. Out of total 120, 98 cases on admission were in good condition but 22 cases were admitted in acute condition and required 1 to 3 units of blood transfusion.

Diagnostic aspiration of Pouch of Douglas was found positive in 41 (34.16%) cases. Diagnostic laparoscopy was done in 16 (13.33%) cases out of total 111 cases of tubal pregnancy, in 53 (44.16%) left tube and in 58 (48.33%) right tube was found involved.

The incidence of tubal pregnancy following temporary or terminal fertility control measures is 23 (19.16%) out of 120 cases as shown in table I. The age of those women ranged between 22 & 30 years and all of them were multiparous. All the 13 women who have undergone sterilization have got 2 to 4 Children. In Cu-T users 3 cases have 2 children each and the fourth one had 3 children. The lone case of oral pills user had 2 children. Out of M.T.P. beneficiaries one woman had one child and had tubal abortion this time. (previous M.T.P. done 5 months back) Second woman was also of parity I but had previously undergone M.T.P. twice, and the last M.T.P. was done only two months back. The third woman who had two alive children, and undergone M.T.P. only five months back. In fourth case the parity was IV and there was a history of M.T.P. only 2 month & 10 days back. The 5th case had parity II and had undergone M.T.P. 6 months back. It appears that with increasing parity the fertility control measures are associated with increasing number of ectopic pregnancy.

Table III
Tubal pregnancy following fertility control

| Type of method used | No. of cases | Percentage |
|----------------------------|--------------|--------------|
| Puerperal Sterilization | 3 | 2.50 |
| Minilap | 1 | 0.83 |
| Abdominal Sterilization | 8 | 6.66 |
| Laparoscopic Sterilization | 1 | 0.83 |
| Cu-T | 4 | 3.33 |
| Oral pills | 1 | 0.83 |
| M.T.P. | 5 | 4.16 |
| Total | 23 | 19.16 |

DISCUSSION

This is a study of 120 consecutive cases of documented ectopic pregnancies. This study has been done on ectopic pregnancy 23 cases admitted to hospital with a history of having used one or other form of family control measure. Unless we analyse a data of a group of tubal sterilization cases and also the total number of confirmed ectopic pregnancy cases in the same group, we can not accurately estimate the risk of tubal pregnancy in tubal sterilization. In the present series 80% cases belong to urban area and all are in the age group of 20 to 30 years.

Para II and para III form the highest incidence while B. Palaniappan et al. (1985) reported highest incidence in para I and para II women.

The incidence of ectopic pregnancy associated with fertility control measures is 19.1% (23 cases) out of 120 cases. B. Palaniappan et al (1985) reported these

figures as 12% in 1985 while David H.S. (1983) in 1983 as 25%.

The incidence of ectopic pregnancy after tubal sterilization in this study in 13 (10.8%) out of 120 cases, while it is 12 (8.5%) out of 140 cases as reported by Taly et al (1985) in 1985. It reflects an increasing trend of such cases in the same institution. However, B. Palaniappan (1985) in 1985 reported 15 (12%) out of 140 cases.

Here majority of the ectopic pregnancies are found in the distal segment of the ligated fallopian tube. This may be due to sperm transport through tuboperitoneal fistulae or recanalised tube with narrow lumen. Our figures correlated will with the finding of Kamla Jayaram (1987) and T. Radha Bai Prabhu et al (1990).

In the present series only one case each of minilap and laparoscopic tubectomy were studied so no inference can be drawn.

The incidence of ectopic pregnancy following Cu-T is 4 (3.33%) out of 120

cases while it is reported as 1.66% by B. Palaniappan et al (1985) in 1985. It indicates an increasing trend in I.U.C.D. users. The incidence of ectopic gestation following use of oral-pills is reported as 2.4% by B. Palaniappan et. al. (1985) in 1985 but here we have studied only one such case so it is unfair to draw any conclusion on the basis of this lone case.

CONCLUSION

Ectopic pregnancy following fertility control measures has now forced us to think not only in terms of finding faults in the techniques but also in terms of the misery suffered by the acceptors of this national programme.

Although the incidence of ectopic pregnancy following family control measures is not alarmingly high, but this risk

which is voluntarily accepted by the beneficiarie have to be taken into mind.

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