

ECTOPIC PREGNANCY FOLLOWING TUBAL STERILISATION

by

A. TALY
P. GUPTA
M. GEHLOT
and
S. PUROHIT

SUMMARY

In a consecutive study of 140 cases of ectopic pregnancy (surgical diagnosis, and confirmed by histopathologic examination) 12 women found to have had prior tubal sterilisation surgery. In 4 cases ligation was done by Viense technique and in rest of the 8 cases by Pomeroy's technique, non following laparoscopic sterilisation. Tubal occlusion procedures for sterilisation are performed now more frequently, their recanalisation will become an increasingly important etiologic factor in ectopic pregnancy.

Introduction

Ectopic pregnancy continues to be an important cause of maternal mortality and the cause of death pronounced haemorrhage. Fatality in this condition can be prevented by early diagnosis and management of the case.

Massive tubal ligation programme has definitely increased the risk of pelvic inflammatory disease and ectopic pregnancy. It may be due to faulty Technique or due to the reunion of cut ends of the fallopian tubes. (Bhasin & Hingorani, 1969; Little, 1975; and Chakarawathi). The diagnosis of ectopic pregnancy should be strongly considered if a patient develops the signs and symptoms

From: Department of Gynaecology & Obstetrics, S.M.S. Medical College, Jaipur (India).

of ectopic gestation having previous tubal ligation surgery.

Material and Methods

Present study was done in the Department of Gynaecology and Obstetrics, S.M.S. Medical College, Jaipur (India), during the period of January, 1977 to December, 1981. During this period there were 140 cases of ectopic gestation. Out of these 140 cases of ectopic gestation, 12 cases had previous tubal ligation surgery. These cases are summarised in Table I.

The women ranged in age from 29 years to 40 years and all were multiparous, 8 were of middle, 3 were of low and 1 case was of high socio-economic group. Seven were urban dwellers and 5 were rural. Only 6 cases had history of amenorrhoea, one had irregular vaginal bleeding for 2

TABLE I
Summary of the 12 cases of Ectopic Pregnancy following Tubal Ligation

Age in years	Obstetric History	Route of Sterilisation	Type of Tubal Ligation	Acute or Chronic	Interval from Tubal Surgery to Ectopic in years	Surgical Findings
29	11 FTND LD-3 yrs.	Abdominal (Puerperal)	Pomeroy's Technique	Chronic	3	Rt. sided Ruptured Ampullary
35	5 FTND LD-2 yrs.	Puerperal Abdominal	Pomeroy's Technique	Chronic	2	Lt. sided distal portion, Tubal abortion
32	4 FTND LD-6 yrs.	Puerperal Abdominal	Pomeroy's Technique	Acute	6	Tubal abortion Lt. side, distal portion
35	6 FTND and 2 abortions LD-5 yrs. LA-7 yrs.	Puerperal Abdominal	Vienesé Technique	Acute	5	Lt. sided, ruptured ectopic, Proximal portion
32	2 FTND LD-3 yrs.	Puerperal Abdominal	Pomeroy's Technique	Chronic	3	Lt. sided, tubal abortion—distal segment
30	3 FTND 1 abortion 3 yrs. LD-4 yrs.	Mini Laparotomy	Pomeroy's Technique	Acute	3	Lt. sided Cornual
40	4 FTND LD-3 yrs.	Puerperal	Vienesé Technique	Chronic	4	Lt. sided Tubal more distal segment
33	5 FTND LD-6 yrs. 1 MTP 4 yrs. back	MTP with vaginal sterilisation	Pomeroy's Technique	Acute	2	Rt. sided ruptured ectopic—distal portion
35	4 FTND LD-8 yrs.	Vaginal sterilisation	Pomeroy's Technique	Chronic	6	Rt. sided in proximal portion
34	3 FTND and 3 Abortions LD-6 yrs.	Puerperal Abdominal	Pomeroy's Technique	Chronic	6	Unruptured tubal pregnancy left side
36	2 FT LSCS LD-3 yrs.	Puerperal with Caesarean	Vienesé Technique	Chronic	3	Right sided tubal abortion, distal segment
32	4 FTND LD-3 yrs.	Puerperal Abdominal	Vienesé Technique	Chronic	3	Right sided tubal more distal segment

months, 4 had continuous vaginal bleeding for 10-15 days with pain in lower abdomen, while I had her normal period 15 days back and was having severe pain in lower abdomen and fainting attacks. Out of 12 cases, 2 were put on conservative treatment giving provisional diagnosis of T.O. mass and chronic Pelvic inflammatory disease for 5 and 10 days but later on diagnosed by laparoscopic examination as ectopic. Other 10 cases were diagnosed as ectopic and confirmed by either colpocentesis or laparoscopy. Four cases were of acute variety, 3 of them were in shock and required resuscitation. The tubal sterilisation was performed 2 to 6 years before the ectopic gestation. In majority of the cases, ectopic gestation was in distal segment of the resected tube.

Discussion

This is the large series of ectopic gestation following tubal ligation (12 cases out of 140 consecutive ectopic gestation). Breen (1970) surveyed 654 cases and found only 4, who had tubal ligation. Harralson et al. (1973) reported 5 cases out of 96 and Paul et al. (1977) 7 cases out of 100 consecutive ectopic gestation following tubal ligation.

In the present series all the 12 cases had tubal ligation as shown in table I, 4 had it by Viense and 8 had by Pomeroy's Technique. Out of these, in 2 patients, one of the fallopian tube was not ligated. In one case the stitch was on mesosalpinx of the unligated tube and in other case the ligature was there on round ligament instead of the tube. In rest of the 10 cases there was pelvic inflammation with adhesions between the tube and ovary and also in 4 cases with intestines and omentum. Breen

(1970) and Harralson et al. (1973) have reported surgical failure for ectopic gestation in their series. Phillips (1976) has reported tubo-ovarian adhesions as the cause Paul et al. (1977) had 7 case, 3 had tubal fulguration and 4 had ligation by Pomeroy's technique. In I case the tube was found unligated. They were of opinion that the recanalised tube due to reunion of cut ends will have smaller diameter of lumen and so sperm can travel through it but not the much bigger size of fertilised ovum and it is the reason why ectopic gestations are more common after tubal ligation than normal pregnancy.

In the present series majority of the ectopic gestation has occurred in the distal segment of the ligated fallopian tube. This may be explained by assuming recanalisation and formation of proximal tubo-peritoneal fistula which had allowed passage of sperm with subsequent fertilisation of ovum in the peritoneal cavity, on the ovarian surface, within the distal portion of tube/fimbrial lumen (Wolf and Thompson, 1980).

References

1. Breen, J. L.: Am. J., Obstet. Gynec. 106: 1004, 1970.
2. Bhasin, K. and Hingorani, V.: J. Obstet. Gynec. India. 41: 622, 1977.
3. Chakarvarthi, S. and Shaildow, J.: J. Obst. Kynec. Brit. C Welth. 82: 61, 1975.
4. Gordon, C. Wolf and Nicholas, J. Thompson: J. Obst. Gynec., 55: 17-19, 1980.
5. Harelson, J. D., Van Nagell, J. R. Jr. and Roddie, J. W. Jr.: Am. J. Obstet. Gynec. 115: 995, 1973.
6. Little, W. A.: Am. J. Obstet. Gynec., 123: 12, 1975
7. Paul, F., Brenner, T., Benedetti, D. R. and Marshal, J. Jr.: Obstet. Gynec. 49: 323, 1977.