ECTOPIC PREGNANCY AFTER STERILIZATION

(Report of 3 Cases)

by

NIRMAL GULATI*

PARAMJIT K. SANDHU**

and

USHA VERMA***

Sterilization is a reliable method with very low incidence of failures (0.17 to 0.5%). However failure may result in ectopic gestation and diagnosis of this condition may be delayed as this may not be kept in mind because of previous tubectomy. We encountered 3 cases of tubal pregnancy following sterilization which are being reported.

Case Report 1: Mrs. R., 30 years P4 + 0, was admitted on 10th June, 1971 with history of amenorrhoea for 7 weeks and pain in lower abdomen for 20 days. She had an episode of severe pain on left side of lower abdomen 3 days ago. She had been having loose stools off and on for the past 20 days. No history of vomiting, fainting or bleeding per vaginum. Her cycles were 3-4/30 days regular, last menstrual period 7 weeks ago. She had abdominal tubectomy by modified Pomeroy's method 3 years ago in this hospital and her last child birth was 11 years back.

On Examination: General condition good. Pulse 88/minute, B.P. 110/75 mmHg. Hb. 10 G per cent. Urine—No abnormality. Only positive finding on pelvic examination was tenderness in lateral fornices more so on left side. She was treated conservatively for 3 days with antibiotics and analgesics to which she did not respond, On 4th day, she was examined under anaesthesia and culdocentesis was positive. At laparotomy there was free blood in the peritoneal cavity due to left tubal abortion. Bilateral salpingectomy was done. Postoperative period was uneventful except for slight superficial gaping of abdominal wound. She was discharged on 10th postoperative day.

Case 2

Mrs. B. H. 36 years was admitted on 25th March, 1974 with amenorrhoea for 2½ months and pain in abdomen for 1 week. She denied any history of vomiting, giddiness or acute pain. She had abdominal tubectomy ten years ago following her last child birth.

On examination: Pulse 130/min. B.P. 130/80 mm Hg. Pallor positive with Hb. 8.2 G per cent. Urine—No albumin or sugar. Only positive finding was a tender ill defined mass in right fornix. A clinical diagnosis of ruptured ectopic pregnancy was made. Needling was positive. At laparotomy, there was free blood in peritoneal cavity due to ruptured ectopic pregnancy right side. Bilateral salpingectomy was done. Postoperative period was uneventful and she was discharged on 8th day.

Case 3

Mr. B. 32 years, P1 + 0, was admitted on 18th March, 1978 with amenorrhoea for 8 weeks and discharge per vaginum associated with itching for same duration. She had been having vague pain in abdomen, more so on left side without any other symptoms for 2 years. She had abdominal tubectomy with appendicectomy 11 years back. Her last childbirth was 12 years back.

*Reader.

**Senior Lecturer.

***Professor and Head.

Department of Obstetrics and Gynaecology, Medical College Hospital, Rohtak (Haryana).

Accepted for publication on 1-9-78.

On Examination: General condition good. Pulse 112/min. B.P. 120/70 mmHg. Pallor present with Hb. 8.0 G per cent. Urine: Alb. nil, sugar nil. Pelvic findings: Cervix pointing downwards. Uterus anteverted enlarged to 8 weeks' size. There was an ill defined mass 3" x 3½" in left fornix. Gravindex test for pregnancy was positive and needling done on 4th day was positive. At laparotomy there was free blood in peritoneal cavity, due to ruptured tubal gestation right side isthmic region. Right salpingo-oopherectomy and left salpingectomy with plication of round ligaments was done. Patient had smooth convalescence except for fever due to malaria postoperatively and was discharged on 10th day.

Comments

In all 3 cases of tubal gestation abdominal tubectomy was done 3 to 11 years earlier. In 2 it was done in interval phase and in one postpartum period. All had amenorrhoea for 7 to 10 weeks and 2 had pain in abdomen. None of the patients had vomiting, bleeding per vaginum or fainting episodes. Mass in lateral fornices was there in all the cases. Two patients had ruptured tubal gestation and one had tubal abortion.

Preoperative diagnosis before admission was made in 1 case, whereas in other 2 it was delayed for 3 days. Delay and errors in diagnosis may be due to the previous history of sterilization. To prevent this error whenever there is history of amenorrhoea, pain in lower abdomen and tenderness on pelvic examination, diagnosis of ectopic gestation must be kept in mind even if the patient has undergone tubectomy. Bilateral salpingectomy should be done in these cases as cases of ectopic pregnancy occurring twice in the same patient are on record (Drake, 1966; Chakravarti and Shardlow 1975).

Incidence of ectopic pregnancy following sterilization has been reported as 2 cases in 1049 puerperal sterilization (Lu and Chan, 1967) and 1 in 833 mixed sterilization (Barglow and Eisner, 1966). Breen (1970) in a study of 654 ectopic pregnancies reported that 4 cases were preceded by tubectomy (0.6 per cent). Chakravarti and Shardlow (1975) reported 12 cases of tubal pregnancy following sterilization and stated that tubectomy was responsible for 12 per cent cases of ectopic gestation. Philips *et al* (1976) encountered one ectopic gestation out of 26 pregnancies following 10447 sterilizations.

According to Prystowsky and Eastman (1955) 25 per cent of puerperal tubal ligation failures result in ectopic gestation, whereas Wacek and Glanthaar (1965) are of the opinion that at least one third of subsequent pregnancies are ectopic. Tatum and Schmidt (1977) on evaluation of all contraceptive methods found that there is potentially increased risk of ectopic pregnancy if these contraceptive procedures including sterilization fail. By indirect statistical analysis, Honore and OHara (1978) reported incidence of ectopic pregnancy after tubal sterilization increases at least 20 times the expected incidence.

Recanalization of the tube has been postulated with the production of narrow lumen sufficient to allow the passage of spermatozoa but not of fertilized ovum (Kalchman and Meltzer, 1966). Dippel (1940) demonstrated tubo-peritoneal fistulae by serial sections of tubectomy site, leading to the postulation that non-absorbable material facilitated the formation of such fistulae. Neuwirth *et al* (1972) reported 2 cases of ectopic gestation following sterilization by culdoscopic tentalum clip application. They demonstrated that the tube on side of ectopic gestation was patent by dye test whereas microscopic examination of site of clip

application on both sides revealed patency.

Summary

Three cases of ectopic pregnancy following abdominal tubectomy are reported.

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