# ECTOPIC PREGNANCY AFTER STERILISATION

## (2 Case Reports)

by

B. C. SHAH,* M.D., D.G.O.

and

NIRMALA B. SWAMI,** M.D.

Sterilisation of both men and women is a very popular and highly accepted method of family planning in India and more so in Gujarat. As large number of women adopt this method, many people have studied likely complications and after-effects of the sterilisation operation. We report two cases of ectopic pregnancy following sterilisation operation in this hospital by modified Pomeroy's technic.

**Case I**

Mrs. L. H., aged 37 years, was admitted on 1-5-1968 for dull aching pain in left iliac fossa since last two months. She was given 20 injections for the same complaint by a general practitioner. Obstetric history — 4 F.T.N.D. — 3 living. Puerperal sterilisation was done following her last delivery nine years back in this hospital.

She was getting regular periods at interval of 30 days lasting for 3-4 days. After opertion, her periods were at 20 days interval, lasting for 1-3 days. Since last five months she was getting her period every 1½-2 months, scanty and for 1-2 days. Last menstrual period — 5 days back — —scanty.

On examination — her general condition was fair. Temperature norml. B.P. 110/72; pulse—80 p. min. No pallor; no anaemia. On abdominal palpation a lump was palpable in the hypogastrium, 2″ above the pubic symphysis. It was partially mobile and slightly tender.

Vaginal examination revealed a cystic mass in the pouch of Douglas and extending into the left fornix. Uterus could not be defined separately.

Provisional diagnosis of an ovarian cyst was made. Hb — 14 gms. Total W.B.C. — 8300/cms; poly — 59%, lypmpho — 32%, eosino — 8%, mono — 1%.

Laparotomy was done on 2-4-'68. On opening the abdomen there were adhesions between the lump and the omentum and intestines. The whole mass could be brought out from the pouch of Dougles and it was found to be in connection with left fallopian tube which was distended to this size. Both the ovaries were normal. Right tube was normal with tubectomy done. Left salpingectomy was done. Specimen revealed ectopic pregnancy with old blood clots in the tube.

**Case II**

Mrs. S. D., aged 32 years, was admitted on 5-3-1968 on the surgical side for pain in abdomen since two days. Pain was continuous and dull aching. Pain was more during defaecation. No H/O giddiness, or vomiting. She had 4 F.T.N.D., last delivery 5 years ago and puerperal sterilisation was done at that time in this hospital.

She was getting regular periods at regular intervals. This time she had 2 months'

*Registrar.

**Asst. Honarary.

*Dept. of Obst. & Gynec. S. S. G. Hospital, Baroda.*

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amenorrhoea followed by slight spotting 15 days back.

On examination — patient was fairly built and nourished, tongue moist and pink, pulse — 120 p. min. B.P. 120/80. On abdominal examination there was tenderness all over the abdomen. No definite lump was felt; no shifting dullness. On vaginal examination, movement of the cervix was painful; there was fullness in the posterior fornix and tenderness in all fornicis. Size of the uterus could not be made out.

Provisional diagnosis of ectopic was made.

**Investigations**

Hb — 9 gms. W.B.C. — 9900/cms. D.C. poly — 65%, lympho — 29% — eosino — 5%, mono — 1%.

Laparotomy was done and there was free blood in the peritoneal cavity. Right sided fimbrial end of the tube was distended. There was no rupture. It was tubal abortion. Right sided salpingectomy was done. Left tube was normal with tubectomy done.

*Discussion*

These two cases suggest that ectopic pregnancy may be due to recanalisation of the fallopian tube after sterilisation.

Canington, Burlington and Bulltt (1943) demonstrated the formation of a patent, epithelialised fibrous cord, 20 mm long, that connected the separated ends of the tube after sterilisation. Operation on more flexible part of the tube appears to have about 5% failures. Dippel, in 1940, on analysis of 5 failures of Madlenar's technique, was able to demonstrate by several sections of operation site that failures were due to tubo-peritoneal fistula and canalisation of mesosalpinx following Madlenar's operation. Non-absorbable material is notorious for its ability to cut through both devitalised and normal tissue.

Failures of cornual resection have been due to small haematomas and foreign body reactions, resulting in fistulae communicating with the peritoneal cavity.

In 1933 and 1939, Lull reported extensively upon the method introduced by Pomeroy, stating that in his clinic the method had given exceptionally fine results. His careful analysis of the reported failures of the Pomeroy method confirms the importance of exactly adhering to the technic. His papers offer proof that Pomroy's technic is the simpler and safest.

In 1946, Knight concluded that 0.31% failure in Pomeroy's operation was better than 0.6% average failure in large series of Madlener type.

Prystowsky and Eastmann reported in 1955, 1022 early puerperal sterilisations by Pomroy's technic with 3 known failures, a ratio of 1:340 operations. Of the few failures culminating in ectopic pregnancy, two were after Pomeroy's and one after Madlenar and one after atypical silk technic.

The majority of authors now agree with Knight that the Pomeroy sterilisation is a "safe, simple, sure and rapid procedure". The reported failures of this operation are much fewer than that of the Medlenar.

Causes of failures are as follows:

i. Errors in technic with incomplete ligation.

ii. Errors in identification, such as ligation of round ligament.

iii. Use of non-absorbable ligatures and undue tension which can facilitate the formation of a new canal.

iv. The tendency toward endometrial proliferation through breakdown of suture lines and fistula for-

mation to produce new uterine openings.

v. The uncertainty in some types of loop resections and ligations, that the size of loop is correct and more than just the serosa of the tube is included.

vi. The incidence of failure of the ligation and resection post-partum is greater than when done during some gynaecological operation.

Spontaneous reopening of the uterine tubes results in (1) in a uterine pregnancy, (2) tubal pregnancy, and (3) formation of a tuboperitoneal fistula.

Dickerson reported that of 19 pregnancies after Madlener's operation about 50% were ectopic.

*Conclusion*

In all types of total sterilisations, the majority of failures become manifest within 3 to 6 months after the original procedure. However, a latent period for as long as ten years has been recorded in the German literature.

Thus, one should always keep in mind this complication when a patient gets irregular periods and abdominal pain following a sterilisation operation, even after 8 to 10 years.

*References*

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