ECTOPIC PREGNANCY FOLLOWING STERILIZATION

(A Case Report)

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Ectopic pregnancy following sterilization has been reported from time to time, but is unusual. This has happened even when a large part of the genital tract has been removed. Graffagnino (1963) and Moayer (1965) reported ectopic pregnancy following vaginal hysterectomy. Ledger and Daly (1963) reported tubal pregnancy following abdominal hysterectomy.

A number of procedures have been evolved to interrupt the continuity of the fallopian tubes to avoid future pregnancies, Pomeroy's method being extensively employed. However, the techniques may not always be successful. In the following case ectopic pregnancy occurre 6 years after tubal ligation.

Case Report

Mrs. R.S., a 33-year-old, P3 + 0, was admitted on March 6, 1969 with the complaint of bleeding per vaginam, severe pain in the lower abdomen and fainting attacks for the last seven days. She continued her office work upto March 5, 1969. Her last menstrual period was on February 13, 1969. She started bleeding again on February 28th. This was associated with severe pain in the abdomen. Periods prior to February 13th, were regular with cycles of 28-30 days with normal flow lasting for 4-5 days with no dysmenorrhoea. She had had 3 full term normal deliveries. After her last delivery 6 years ago, a puerperal sterilization by Pomeroy's method, had been performed on her elsewhere. Physical examination on admission revealed general condition fair, pulse 68 per minute, B.P. 110/70 mm. of Hg. Pallor was present and temperature was normal. Abdominal examination revealed small subumbilical midline abdominal scar. Slight tenderness was present in the suprapubic region. No definite lump was felt. There was no shifting dullness. On pelvic examination the cervix was directed backward, and was soft in consistency, movements of the cervix were not painful. The uterus was anteverted and bulky. There was tenderness in all the fornices. No mass could be felt. On speculum examination the cervix was bluish. Laboratory investigations revealed haemoglobin 10 gms. per cent. Packed cell volume 29 per cent, leucocyte count 10,000; D.C. poly—69, lympho—31. Examination of urine was negative for sugar and albumin. There were no pus cells and no pathogens grown on culture. Diagnosis of ectop'c pregnancy or pelvic inflammation was entertained. A bimanual pelvic examination was done under anaesthesia. The cervix was directed backward, soft in consistency. The uterus was anteverted and bulky. No mass could be felt in any of the fornices. On speculum examination the cervix was bluish. Cul de sac aspiration was negative. She was given a course of antibiotics to which she showed great symptomatic relief. She was well for 6 days but then she again started bleeding per vag'nam and had severe pain in the lower abdomen. On examination she looked pale, pulse 80 per minute, B.P. 100/70, and temperature was normal. The tenderness over the suprapubic region had increased, though no mass could be felt. On pelvic examination the cervix was directed backward, and was soft in consistency, movements of the cervix were very painful. The uterus was anteverted and bulky. There was an ill-

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defined mass in the posterior fornix, which was pulsatile and tender. There was blood on the examining finger. On speculum examination cervix appeared blue. Diagnosis of ectopic pregnancy was made and laparotomy was done. There was free blood in the peritoneal cavity, left tube was the site of ectopic pregnancy at its fimbrial end. It felt fibrosed in the middle part, left ovary was cystic and was bleeding. Right tube was fibrosed in the middle due to previous sterilization. Right ovary was normal.

Left salpingo-oophorectomy was first done. To avoid any future ectopic pregnancy, right salpingectomy was also done. The uterus was bulky and there was a small subserous fibroid on the anterior wall which was enucleated. Her postoperative period was uneventful.

Comments

In the case described above ectopic pregnancy was due to the recanalization of the fallopian tube after sterilization. Carrington *et al* (1943) demonstrated the formation of a patent, epithelialised fibrous cord, 20 mm long, that connected the separated ends of the tube after sterilization. Dippel (1940) stated that failures were due to the formation of a tubo-peritoneal fistula and canalisation of mesosalpinx following Madlenar's operation. Non-absorbable material can cut through both devitalised and normal tissues. Lull and Mitchell (1950) reported good results following Pomeroy's operation. The majority of the authors now agree with Knight (1946) that the Pomeroy sterilization is a safe, simple, sure and a rapid procedure. Failures of cornual resection have been due to small hematomas and foreign body reactions, resulting in fistulae communicating with the peritoneal cavity.

Causes of failures following sterilisation are as follows:

1. Incomplete ligation of the fallopian tubes.

2. Ligation of round ligaments.

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

4. The endometrium may proliferate through breakdown of suture lines and fistula may be formed to produce new uterine openings.

5. There is higher failure rate when the operation of ligation is done during early post-partum period as compared to when this operation is done along with some gynaecological operations.

Spontaneous reopening of the fallopian tube may result in uterine pregnancy, tubal pregnancy and tubo-peritoneal fistula. The majority of the 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 as quoted by Shah and Swami (1969).

This case highlights the fact that diagnosis should be entertained, in spite of history of sterilization operation, performed in the recent or even in the remote past, if history is otherwise suggestive of ectopic pregnancy.

Summary

A case of ectopic pregnancy following tubal ligation performed 6 years earlier is reported.

It has been stressed that even though the occurrence of ectopic pregnancy following sterilization operation is rare, yet the condition should be borne in mind in the presence of history otherwise typical of tubal pregnancy.

It is also recommended that when a laparotomy is done for ectopic pregnancy following sterilization, bilateral salpingectomy should be done to avoid any future ectopic pregnancy.

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