ECTOPIC PREGNANCY FOLLOWING TUBAL LIGATION

by

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Introduction

Ectopic pregnancy continues to be an important cause of maternal death, accounting for 6-10% of total maternal mortality. There may be a false sense of security on the part of medical personnel in females "protected against conception", this diagnosis may be delayed.

In Lady Hardinge Hospital total 6472 tubectomy operations were done during the years 1974-79. Out of these cases, 14 patients conceived again (0.216%), 12 of these had normal intrauterine pregnancy, while 2 had ectopic tubal pregnancy (14.28%). These 2 cases are reported breifly.

CASE REPORTS

Case 1

Patient R. K., 30 years, para 5, had a post partum sterilization in January 1977, after a term normal delivery. Except for slight local stitch sepsis postoperative period was uneventful and she was discharged in a fit state 6 days later.

She was readmitted on 19-7-79 with history of pain in lower abdomen and fainting attacks since previous night. Her last menstrual period was on 1-7-79 with normal flow. She had regular periods prior to this, cycle 6-7/30 days.

On examination, general condition was fair, Pulse-96/min., B.P.-110/80. On pelvic examination, cervix was pointing forwards, uterus was retroverted, bulky, soft. Right fornix clear. A cystic non-pulsatile mass was felt in the left fornix. No excitation pain. Per speculum-erosion present, cervix not blue. A provisional diagnosis of ectopic pregnancy was considered.

Culdecentesis was done on 20-7-79 and clotted blood aspirated, thus laparotomy done. On opening abdomen there were no adhesions or haemoperitoneum. Tubal pregnancy was present on the left side at distal end of tube. Evidence of previous ligation was present at mid position in both the tubes.

Left sided salpingo-oophorectomy was done. Abdomen was closed in layers. Patient recovered well, with no post operative complications. Histopathology confirmed diagnosis of ectopic gestation.

Case 2

Patient V. D., 30 years para 4 had a normal delivery on 8-11-75, followed by sterilization on the same day by modified Pomroy's technique. Postoperative period was unevenful. She remained comfortable on a follow up for 2 years.

On 13-1-80 patient reported with amenorrhoea of 1½ months and vaginal bleeding for last 15 days. There was history of abdominal pain off and on with painful micturition and defeacation for the same duration. Patient had regular periods earlier with a cycle of 7/30 days.

On examination, cervix was pointing forwards, os closed, uterus was anteverted and of normal size. A big tender soft mass was felt in the right fornix, extending on to the left fornix and pouch of Douglas, Cervical movements not painful.

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Needling done through P.O.D. was positive. On opening abdomen, uterus was normal. The ampullary part of right tube was enlarged and contained ectopic pregnancy. No site of rupture could be seen. Few adhesions were present to the surrounding structures. Left tube was normal with scar of previous ligation evident grossly as a gap in the tube.

Bilateral salpingectomy was done. Postoperative period was normal. Patient went home on ninth day. Histopathology confirmed the diagnosis of ectopic pregnancy in ampullary part of right tube with evidence of sterilization in both the tubes.

Discussion

Cheng *et al* (1977) studied 51 cases of post sterilization pregnancies in Singapore. Out of these, 8 (15.68%) were tubal, rest being intrauterine. They observed that ectopic pregnancy was more following Pomroy's ligation of isthmus (31%) than ampullary ligation (15%). Following fimbriectomy no ectopic pregnancy occurred. It was reverse with intrauterine pregnancy, failure rate being 3.12% after fimbriectomy, 1.67% after ampullary ligation and 0.34% after ligation and division of isthmus.

Metz and Mastroianni (1978) postulated that possible pathogenesis of pregnancy in distal segment could be recanalization with a narrow lumen which allowed passage of sperm but not fertilized ovum. Same was observed by Chakarvarti and Shardlow (1975). In 7 of 12 cases reported by Chakarvarti *et al* pregnancy was implanted in the distal portion of divided tube. In rest implantation occurred proximal to operation site suggesting tuboperitoneal fistula through which ova passed, got fertilized but could not reach uterine cavity due to tubal kinking.

In both cases pregnancy was implanted distal to ligation site. Chakarvarti and Shardlow (1975) performed unilateral salpingectomy in 8 cases bilateral salpingectomy in 4 cases, but advocated bilateral salpingectomy to be ideal treatment as repeat ectopic in other tube occurred in one patient following unilateral removal of tube. Drake (1966) supported the view as he had one patient undergoing Pomroy's sterilization in 1960, she had first ectopic pregnancy in 1963 and second in 1965. Metz *et al* (1978) also advocate bilateral salpingectomy as treatment to avoid future pregnancy. In our earlier case unilateral salpingectomy was done but second case had both tubes removed.

Conception has been reported as late as 8 years after sterilization thus whenever a patient develops signs and symptoms of pregnancy following tubal ligation, diagnosis of extra uterine pregnancy has to be very strongly considered.

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