

## SURGICAL COMPLICATION OF TUBECTOMY

by

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### Introduction

Fallopian tubal ligation by minilaparotomy is now an accepted procedure in all countries. Laparoscopic sterilization has gained grounds in some developed countries and in some affluent centres in developing countries.

Many centres like Medical College Hospitals, Private hospitals, Nursing homes, Primary Health Centres and doctors in private practice are carrying out permanent female sterilization by the minilaparotomy. Surprisingly and fortunately enough the complication rate requiring major surgical procedure after this procedure is very low and hence such reports are scanty. However, one ought to be aware of the complication that require surgical care, and hence this paper.

Attempt is here with made to detail our experience regarding the surgical complication seen at Mary Wanless Hospital. We have seen 24 patients during the past 10 years (1969 to 1978) who needed major surgical procedures following tubal ligation by minilaparotomy done elsewhere (Chart No. 1). There were 3849 gynecologic operations carried out in this hospital during this period, thus 0.68% gynecologic operations done in Mary Wanless Hospital were due to complica-

tion from tubectomy done by minilaparotomy technique. Out of 6203 tubectomies carried out in this hospital for the past 10 years. There has been no such complication.

### Material and Methods

Retrospective study of patients developing major surgical complication needing major surgery was undertaken with a view of finding different reasons for major surgery. There were 24 such complications needing major surgery. There were 9 cases of hydrosalpinx, one of which had twisted resulting into a gangrene, 9 patients had inflammation in the pelvic cavity due to the initial tubectomy, 3 of which were subacute forming a large mass in the abdomen. There were 3 patients who had ectopic pregnancies and 3 had intestinal obstruction.

**Ectopic pregnancy:** We have seen 3 such patients. In 2 of them a diagnosis of pelvic infection was made, the third one was suspected to have ectopic from our previous experience.

### CASE REPORT

Review of the three cases of ectopic pregnancy after tubectomy seen in this hospital showed.

- (1) History of Family planning operation in recent past was available.
- (2) The patients had irregular periods following the tubectomy.
- (3) The period prior to detection of ectopic pregnancy was not significantly different from her other periods.

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(4) Signs and symptoms simulating pelvic peritonitis were present.

(5) Shock or signs of internal hemorrhage was not evident in any of the patients.

**Hydrosalpinx:** There were 8 patients with gross hydrosalpinx. Six were bilateral, and 2 were unilateral, among the 6 bilateral, 2 were large, and practically equal in size. Four patients had 1 large hydrosalpinx and other was small. The largest hydrosalpinx measured 3" diameter and was 6" long. (Fig. No. 2).

#### Case History:

Mrs. S. K. 35 years—family planning operation done 7 years ago.

(1) Pain in abdomen—6-8 years.

(2) Dysmenorrhea congestive type—6 years duration.

(3) Polymenorrhea—2 years.

She underwent tubectomy operation 7 years ago. P.E. well built woman CVS RS OK. BP 120/80. Abdomen showed L & S. not palpable, diffuse mass in supra-pubic region felt just at the pelvic brim. P.V. examination showed normal uterus R.V. R.F. with tender masses in both adnexa. The mass were tense cystic in nature. Diagnosis of bilateral hydrosalpinx was made. At operation the diagnosis was confirmed. The uterine end tubes were separate from the uterus showing a gap between the cut ends of tube during tubectomy operation done previously.

Clinical diagnosis of ovarian cyst with possible twist was made. At operation the uterus was found to be normal retroverted pushed to left by a large tense cystic irregular mass. This was found to be twisted hydrosalpinx with one anticlockwise turn.

Twisted hydrosalpinx can occur only where the tube is cut during operation and the cut ends are separate.

#### Late Intestinal Obstruction

This is a surprisingly uncommon complication after tubectomy operation. The bowel involved has been ileum in all the 3 cases. The presenting features were just as in any postoperative intestinal obstruction.

**Chronic Pelvic Infection:** There were 6 such patients.

The complaints were lower abdominal pain, gaseousness, low grade fever, sense of ill health.

**Sub-acute inflammatory mass:** Three patients presented to us. All cases were post operative tube ligation. The complaints were of one of them is given below.

Severe lower abdominal pain, distension of the abdomen and occasional vomiting, low grade fever—15 days.

P.V. firm mass was filling entire pelvic. Clinical diagnosis of sub-acute intestinal obstruction with post operative inflammatory mass in the pelvis was made.

Peritoneal cavity was explored by low mid-line incision. Uterus and uterine adnexa were engrossed in a mass. The loops of ileum and omentum were adherent to this mass. The Omentum, loops of bowel, were gently released from the adhesions and bilateral salpingectomy along with subtotal hysterectomy was carried out. Biopsy of this mass revealed sub acute inflammatory process.

#### Discussion

There were 24 women having major surgical complication following tubectomy done by minilaparotomy.

Complication following minilaparotomy were negligible.

The complication seen were, hydrosalpinx in the cut tube and chronic infection in the pelvis. Both these complications together form 75% of the problem and is no doubt preventable by careful selection of the case and proper intra and post operative care of the patient. Use of prophylactic antibiotics under special circumstances may be worth while.

It is also important to note that ectopic pregnancy can occur after tubal ligation, especially when the tubes are cut.

Hydrosalpinx in the fimbriated tubal segment also occurs. Many authors are of the opinion that the majority of post-operative adhesions causing obstructive complications after tubectomy are due to cutting of the tube during operation.

Conclusion

(1) Post operative complication requiring major surgery are uncommon.

(2) Careful selection of the patient, extensive intraoperative and postoperative care and prophylactic antibiotics in selected patients may prevent the majority of complications.

(3) Cutting of the loop of the tube may best be avoided.

(4) Occurance of ectopic gestation following tubectomy is to be borne in mind.