Gut Injury : A Rare Complication of Mini-laparotomy Tubal Sterilization

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Introduction

Tubal sterilization by minilaparotomy under local anesthesia is a safe, effective, low cost technique well suited for developing countries[1]. The death rate after tubal ligation is 2-10 per100,000 sterilizations and is mainly due to general anesthesia or vascular injuries[2].

Gut injury is a known complication of laparoscopic tubal sterilization[3]. Even in minilap tubectomy, if there is a previous surgery or dense adhesions of the intestines with peritoneum, the surgeon can end up injuring the gut. It is unknown to have gut perforation in an uncomplicated case of minilap tubectomy. Here is a case of gut injury during minilap tubectomy that we came across for the first time in the last 40 years.

Case Report

A 24 year old P_1A_0 was referred on 12th June, 2002 , in septic shock. Referral notes showed that she had minilap tubectomy performed at a community health center (CHC) on 10th June, 2002 without any difficulty and was sent home after two hours in good health. It was not done in a camp. The next day she was readmitted to the CHC with the complaint of pain in abdomen and vomiting and was administered broad spectrum injectable antibiotics. But her condition deteriorated very fast, so she was referred to us. On examination, her general condition was very poor, she was pale with cold extremities and had labored respiration. Her pulse rate was 140 min and systolic blood pressure 60 mmHg. The abdomen was distended, tense and tender with absent bowel sounds. The dressing was a dry covering, 2.5cm long, with apparently healthy stitch line in suprapubic region. There was no scar mark on the abdomen. Vaginal examination revealed tenderness and fullness in all the fornices due to which exact size of the uterus and adenexas could not be made out. Investigations showed Hb-8.5gm%, urine examination-normal, and serum electrolytes and coagulation profile within normal limits. An x-ray of the abdomen showed multiple air fluid levels and there was air under the diaphragm in sitting position. Diagnosis of gut injury was made and exploratory laparotomy performed 4 hours after admission on 12th June,2002. She had cardiac arrest just before the laparotomy but was revived. At laparotomy she had fecal peritonitis and about a liter of foul smelling fluid was aspirated. There was a big perforation in the small intestine about 25 cm from the ileocecal junction involving half of the circumference. Uterus, adnexas and tubectomy sites were normal with no adhesions in between gut loops or with the peritoneum The intestine was repaired in two layers. Postoperative period was hectic. She had to be put on a ventilator and was shifted to the respiratory intensive care unit. Inspite of all our best efforts she could not be saved and died on 13th June,2002 due to septicemia.

Discussion

If the gut injury was suspected at the time of tubectomy or even on the day of readmission at CHC by the surgeon the patient would have been referred earlier and might have been saved. As part of tubectomy training, more emphasis should be laid on how to suspect and diagnose the complications of tubal sterilization so that these can be managed timely and efficiently.

References

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