

MINILAP STERILISATION

(Study of 1800 Cases)

By

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SUMMARY

Study of 1800 cases which underwent minilap sterilisation is presented here. Minilap sterilisation holds promise as a simple, quick low-cost method of sterilisation which may be especially useful in developing countries. However, experience with this procedure is new, more research and clinical experience is required to predict its future. Hence the details will be published with the increase in the number of cases.

Introduction

Procedure of abdominal sterilisation by small abdominal incision was first described for post-partum sterilisation by Uchida and his colleagues (1961) Frank stubbs (Texas, U.S.A.) developed the technique still further using only local anaesthesia creating a true outpatient procedure in 1973. Vitoon (Thailand) developed another simple minilaparotomy technique using local anaesthesia and ordinary surgical equipment.

Material and Methods

1800 cases underwent minilap sterilisation in State Zenana Hospital, Jaipur in the period extending from March, 1984 to March, 1976 and also in the rural camps held under the UNFPA and Directorate of Family Welfare.

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Only minimal pre-operative preparation is required. The patient arrives at the hospital or camp after fasting for 4-6 hours preferably. Laboratory studies and pre-anaesthetic check up are performed one day or just before the procedure. Patient is taken on operation table after voiding urine. In cases of early pregnancy Medical termination of pregnancy is carried out first by suction evacuation after giving intravenous sedation of atropine, fortwin and phenargan. If needed, intravenous drip is started to keep the patency of vein. No uterine manipulation is done. After giving supine position, skin of incision site is infiltrated with 1% xylocaine. Abdomen is opened by vertical incision of 2 cm to 2.5 cm in layers, 3 fingers above pubic symphysis in non-pregnant cases. On opening the peritoneum, edges of it are secured by Alis forceps, local anaesthetic is spilled over the tubes. If possible, Trendelenburg position is given which causes the intestines to fall away from incision site. Index finger of left hand is introduced in the peri-

toneal cavity, tube is felt and fixed on uterus, a small Babcock is introduced alongside the finger, and tube is brought out of incision and ligated by modified Pomeroy's technique. Peritoneum is closed by pursestring suture using 00 chromic catgut. The rectus sheath is closed by a single figure of eight suture. The incision in skin and subcutaneous fat is closed with one or two thread stitches.

After operation minimal post-operative care is required since most women recover quickly within one to four hours. Ordinary analgesics are given for post-operative pain. In the present series inj. penidure LA. 12 is given after negative skin test. The patient is discharged on the evening of operation and instructed not to bath the dressing but keep it clean and dry. Other than avoiding heavy work, there is no restriction of activity. They are called on 5th or 6th day for removal of stitches. Average operation time in the present series was 10 min with a range of 8-24 min.

Results

Present study comprises of 1800 cases who underwent minilap sterilisation. Out of 1800 cases, 30% (540 cases) were puerperal cases, 42.5% (765 cases) were with early pregnancy (upto 10 weeks) and rest 27.5% (495 cases) were of interval type. That shows that patients are easily motivated for sterilisation during pregnancy. All were healthy women in the age group of 23 to 35 years, except 63 cases. Out of 63 cases, 1.5% (24 cases) were of compensated heart disease, 2% (36 cases) were with moderate anaemia of 7 gm% and three cases was of bronchial asthma of controlled type. These are the cases where laparoscopy is usually contra indicated.

Difficulties and Complications

Difficulties in the procedure was because of undetected peritoneal adhesions, obesity or previous abdominal surgery like caesarean section. In the present series average complication rate was 2%. In Thailand, where 2800 women have been sterilised by Vitoon's procedure using uterine elevator, the average complication rate is 0.8 per cent, (ranging from 1% to 0.6%) whereas 6.5 per cent of Pramole's patients (he used proctoscope) had complications which occurred early in the series. In this study in 3 cases there was haemorrhage from torn mesosalpinx. In 2 cases, incision was extended and bleeding controlled and in 1 case it was controlled through the same incision. In 18 cases adhesions were encountered during operation. In 15 cases they were of minor nature not causing any problem in surgery. In one case tube and ovary were adherent, so incision was extended and salpingectomy done.

In 54 (3%) out of 1800 cases incision was extended, out of these, 24 patients were very obese. In one, bladder was injured during opening the abdomen, so injury was repaired by a multiple layer closure of bladder. A foley's catheter was inserted for 10 days. Post-operative period was uneventful. In another obese patient, difficulty encountered in finding the tubes, as tubes were short, so incision was extended. Obesity is a relative contraindication to minilap because the peritoneal cavity is difficult to reach through multiple layers of fat. Obesity not only makes the operation more difficult but it prolongs the operation time and increases the likelihood of subsequent morbidity. Incision was extended in two cases of haemorrhage from mesosalpinx (mentioned earlier), in one case of adhesion and in one case tube

on one side could not be found, so incision was extended, but on exploration that sided tube and ovary were found to be absent.

All the patients were discharged on the same day in the evening or next day, except in 117 cases (7.5 per cent) out of these 24 were heart cases and 36 were with anemia and three cases of bronchial asthma, and 54 other cases in which complications occurred or the patient did not wish to go home for some or the other reason.

Wound sepsis occurred in 0.5% (9 cases) in one wound gaped because of subcutaneous haematoma so patient was admitted. In rest a stitch abscess occurred.

In the present series minilap sterilisation was performed under local anaesthesia in 62% cases, and under general anaesthesia in 26%, whereas local was supplemented with general anaesthesia in 12% cases. Local anaesthesia is

tolerated well by rural women as compared to city women. This may be because of their high threshold for pain. There was no anaesthetic complication in the present series.

Because small size of incision prevents extensive abdominal exploration or treatment, this form of sterilisation is not suitable for women with suspected adnexal pathology.

References

1. Pramole: Proctoscopic tubal sterilisation, *Contraception*. 8 (5): 415-428, Nov. 1973.
2. Vitton: Suprapubic tubal sterilisation, uterine elevation method. *Training manual*, p. 17.
3. Stubbs, F. S.: A simplified method of outpatient tubal resection for female sterilisation, paper presented at the association of planned parenthood physicians, 12th annual meeting.
4. Uchida, H.: *Am. J. Obstet. Gynec.* 121: 153, 1975.