

LAPAROSCOPIC FOLLOW-UP OF SILASTIC BAND STERILISATION

(A Study of 100 Cases)

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SUMMARY

In the present study 100 women who underwent sterilisation with silastic band were followed laparoscopically and the findings recorded.

The knuckle formation of the fallopian tube with the band at the base was the most common finding, followed by separation and closure of proximal and distal portions of the tube.

Bands were well peritonised in 79 patients. They were deeply embedded in the tube in 14 patients. In 3 patients the bands were not visualised. Two patients showed improper application of band with free spill of dye. They were subjected to laparotomy and bilateral salpingectomy was carried out.

Flimsy adhesions to surrounding structures were found in 3 patients. They were lysed with the laparscope. Two patients showed major adhesions with omentum and intestine. They had undergone vaginal sterilisation.

Hydrosalpinx formation was noted in 3 cases.

Introduction

Today female sterilisation is increasingly performed by laparoscopic method. With passage of time, electrocautery is fast disappearing and getting replaced by silastic bands. Silastic bands at some places are not used only through laparoscope but even at minilap and vaginal sterilisations. Therefore it is important

and interesting to know the changes after sterilisation wherein silastic bands are used.

Aims of the Study

This study was carried out with a view to find out the fate of silastic band after a period of 6 months or more, and to find out the anatomical condition of the internal organs following the application of silastic band.

Material and Methods

One hundred women that underwent laparoscopy after silastic band tubal

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sterilisation at 6 months or longer interval at K.E.M. Hospital, Bombay, from January 1977 to February 1981 have been presented. Details of previous surgery were recorded. With laparoscopy tubal state along with patency silastic bands and adhesions with surrounding organs were carefully observed and recorded.

Majority of the patients (i.e. 94) were in the age group 25 to 39 with maximum in the range 30 to 34. Four patients were more than 40 years of age and 2 below 25 years of age.

The primary operative procedures were as follows:

Procedure	No. of patients
1. Abdominal sterilisation	10
2. M.T.P. with laparoscopic sterilisation	78
3. Abdominal sterilisation with intra-amniotic saline	7
4. Vaginal sterilisation	5
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Total	100
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Post-sterilisation complaints

Of the 100 women followed, 24 had some minor complaints following sterilisation. Pain in abdomen was the chief complaint in 13 patients. Eight patients complained of pain in abdomen with mild backache. Two patients had backache and 1 had leucorrhoea.

Procedure

In this study all except 2 patients were given general anaesthesia. The induction of anaesthesia was carried out with 250 mg of sodium pentothal. Anaesthesia was

then maintained with nitrous oxide. Endotracheal intubation was accompanied with 100 mg of succinyl choline given intravenously.

7 mm diameter Storz fiberoptic laparoscope was used to visualise the internal organs. Methylene blue was injected through the Rubin's cannula, to demonstrate the tubal obstruction. When required endometrial curettage was carried out.

After introducing the laparoscope, step by step all organs were examined carefully. Special attention was paid to identify the band itself, as in many cases it was covered with peritoneum or just embedded in the tubal stump. The state of peritoneum, the proximal and distal portions of fallopian tube adhesions to ovary or other structures were noted.

Findings

Of the 100 patients the site of sterilisation was proximal in 30 patients while in remaining 70 patients it was distal.

Knuckle of the tube was seen in 72 patients. In 23 patients the proximal and distal portions of the tube were separated. Hydrosalpinx formation in distal portion was found in 3 patients. In 2 patients the tube was distorted due to previous failed sterilisation.

The band was well peritonised in 79 patients, while in 14 cases it was buried in tubal stump and was not properly visualised. In 3 patients the band was not visualised at all. Double band application noted in 2 patients while in 2 cases it was improperly applied.

The adhesions with surrounding organs on peritoneal wall was noted in 8 patients, out of which 4 had tubo-ovarian, 2 had adhesions with parietal wall and 1 each having adhesions with round ligament and tubo-tubal adhesion. Major

adhesions were noted in 2 patients. One patient had omental and another having intestinal and omental adhesions.

Dye study using methylene blue injection was negative in 98 patients, thus demonstrating tubal block. Two patients showed spill from fibrial end. The bands were seen improperly applied in both the cases. The bands were sitting at the base of the fallopian tube i.e. on the mesosalpinx.

One patient presented with ectopic pregnancy where the ectopic developed distal to the sterilisation site. It was the same patient in whom omental adhesions were noted.

Conclusions

The finding noted here compare well with those described by Yoon and Poliakolf (1979) in their preliminary report. They followed up 100 cases clinically, of which 17 cases were followed up by

hysterosalpingogram. Four patients underwent laparoscopic re-examination.

Thus in our study we have tried to observe the changes occurring in the fallopian tube, peritoneum and the band itself, through the laparoscope. This was done with the aim of knowing the effects of the band on the above structures, as we thought it necessary before adopting the method for large scale family planning programme, in preference to other methods.

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Reference

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