

LAPROSCOPIC STERILIZATION VIS-A-VIS RURAL POPULATION

(A personal experience)

by

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SUMMARY

The present series of 2800 cases, had minimal complication as the tubes were ligated with silastic rings under laproscope and the camp approach proved this method of mass sterilization as a simple, safe, effective and economical procedures acceptable to rural masses.

Introduction

'Laprosopic Fallop ring sterilization procedure' is quite safe, quick, requiring hospital stay of a few hours only and poses least immediate or late complications. Hence this procedure induces minimum strain for the patient, the surgeon and the Government as well.

As per Government programme, I performed 'Laprosopic Fallop ring sterilization Operation' of village women of remote and distant places at different public health centres (P.H.C.) of Bhagalpur, Monghyr and the then Santhal Parganas districts were performed from January 1983 to March 1983. In this trimester about 2800 operation were performed.

Material and Method

The rings applied on the tubes were of inert silicone rubber bands, which is composed of dimethyl polysiloxane with 5%

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barium sulphate. Rings were of the size 1 mm diam and 2 mm thick. The rings applied crush the tubes by cutting it's blood supply.

Most of the patients were villagers, both tribal and non-tribal. These cases were selected by local doctors by proper check-up. Females free from medical disease, pregnancy, obesity etc. were selected for the procedure. The operation was done under sedation and local anaesthesia. The case had to adopt Trendelenberg position. The gas used for pneumoperitonium was minimum 300 cc. of atmospheric air. Most (80-90%) of the cases in their thirties having 2 or 3 children only and about 90% of them were from low income group. The duration of operation was 3-5 minutes on an average, maximum being 10 minutes in obese patients.

Complications

The complications met in this series were divided into three groups.

TABLE I
Immediate Complications

Nature of problem	No. of cases	Diagnosis
Drug reactions anaphylaxis to Diazepam	1	Sudden apnoea
Over aedation	50	Perspiring cold skin
Mild surgical emphysema	100	Irregular distension of abdomen, restricted movement of Veree's needle
Moderate	10	Irregular enlargement of abdomen with no obliteration of liver dullness.
Needling of bowel	20	Irregular enlargement of abdomen with passage of foul-smelling gas through Veree's needle.
Non-visualisation of tubes	50	Fimbrial ends not visible with the laproscope. Large uterus visualised with the uterine manipulator.
Tubal—transection	5	Both the cut ends of the tubes Visualised and ligated with the help of rings.
Misapplications of rings into round ligament (100), ovarian ligament (50), mesosalpinx (50) & omentum (10) Total 10 cases.	210	Detected with the Leproscope and corrected by other rings.

TABLE II
Postoperative Complications Within 24 Hours

Pain abdomen	1400 = 50%	Due to ischaemic of tubes
Shock	4	Cold clammy perspiring with low B.P.
Stitch pain	100	

TABLE III
Remote Complications During Follow-up

Nature of problem	No. of cases	Diagnosis
Subcutaneous cellulitis	1	Red tender anterior abd.
Pain in abdomen	10	GI symptoms

The procedure could not be completed in 1 obese case;
Mini laprotomy done.

Deaths, 2 Autopsy revealed air embolism in I case and anaphylaxis in I.

Discussion

Ever increasing experience with tubal sterilization is proving very satisfactory for the rural mass. Verma and Murphy (1977), Sethi *et al* (1978) also observed the main advantage of this procedure as minimal hospital stay, no postoperative limitations, least discomfort to the patients with least expenditure for the government. As the duration of the operation is 3-5 minutes, a vast population can be served in a short period. In our series, the hospital stay was 2-3 hours and cases returned home the same day. Complications were also minimal. The chances of abdominal distension has been minimized by instilling less air. Misapplication of rings was 0.13% with Gulati and Agrawal (1978) and 1.5% in this series. Though these complications appear to be a little on higher side compared to those in the series of Gulati and Agrawal (1978). Haemorrhage during operation was controlled by putting rings at the bleeders. Hence it can be inferred that the procedure is simple, safe, effective and economical, also agreed by Sethi and Mukherjee (1978).

Increasing acceptance by the rural people is due to immediate return to home and with least complications, as can be witnessed by ever increasing registration of new aspirants. Recanalisation if needed, is easier after the procedure. Visible confusion regarding the procedure in rural masses also gradually vanished by beholding the performance.

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TABLE III

Group Characteristics During Follow-up

Characteristic	No. of cases	Percentage
Age (years)		
15-20	1	1.5
21-25	10	15.4
26-30	55	83.1
Total	66	100

The duration of follow-up was 1-2 years.

Table 3. Characteristics of the study population.