

SOME OBSERVATIONS ON 17,520 LAPAROSCOPIC STERILIZATIONS

by

RAVEJA RAJ
TANDON JAYSHREE
MISRA RAMA
SHARMA DEVASHISH
and
GANGUALY GAURI

SUMMARY

This study was conducted on 17520 cases of Laparoscopic sterilisation using falope rings. A comparative analysis was done on tubectomies performed in the Medical College, District Hospitals and Primary Health Centres. This method has the advantage of short hospital stay. Cases done in the camps of both district hospital and at P.H.C. level had a higher incidence of complications and it was judged that if camps are to be preferred looking at the high acceptance rate, then proper selection of patients, improved theatre conditions and careful post-operative watch and follow up are imperative.

Introduction

Female laparoscopic sterilisation procedure and the advent of non-cautery tubal occlusion techniques has further increased its popularity. The application of the falope ring is safe in eliminating the risk of thermal injury at the same time it is simple and easy to learn. However, there may be associated difficulties complications and failures.

Material and Methods

This study was conducted in the Department of Obstetrics and Gynaecology, M.L.N. Medical College, Allahabad from 1st January 1982 to 31st October 1982. Seventeen thousand, five hundred and

twenty sterilisations were done. The procedure was performed in the Medical College Hospital itself, in the camps organised by neighbouring districts and in Primary Health Centres of Allahabad. The number of cases in different groups is given in Table I.

TABLE I
Distribution According to Place of Operation

Place of Operation	No. of cases
Swaroop Rani Nehru Hospital, Allahabad	2,020
District Hospital Camps	13,500
Primary Health Centre Camps	2,000
Total	17,520

*From: Deptt. of Obst. and Gynec, M.L.N. Medical College, Allahabad.
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The Patients were screened to rule out any medical or surgical problem and after

a routine hemogram and urinalysis, a pelvic examination was done to exclude pregnancy or pelvic pathology. They were kept on empty stomach about 8 hours prior to the procedure.

With the patient in lithotomy and partial Trendelenburg position, intravenous Diazepam 10 mg and Pentazocine 30 mg was given. Pneumoperitoneum was created with Verre's needle, inserted through a 1-2 mm incision (atmospheric air was pushed in with the help of ordinary rubber tube and bulb). The incision was extended to about 10-12 mm and the trocar and cannula inserted. The laparoscope was then passed in the tubal occlusion done by silastic bands (KLI). The skin was closed with a single catgut mattress suture after releasing the pneumoperitoneum.

Observations and Discussion

The present study was conducted on 17,520 cases of laparoscopic tubal sterilisa-

tion. The procedure was performed at three different places. S.R.N. Hospital, District Hospitals and Primary Health Centres of Allahabad.

The maximum number of accepters who underwent tubal sterilisation at S.R.N. Hospital as well as in primary Health Centres of Allahabad were in the age group of 26-30 years (Table II). While in the other districts 41.8% were in the age group of 31-35 years. The possible reason for this could be a wide publicity, and increased awareness in Allahabad and surrounding areas led to a large turnover of young patients for sterilisation.

Most of the patients in the present study were para 4 and above with mean parity of 4 (Table III). The greatest attributable factor for the higher parity is a social taboo to have a male child prior to tubectomy.

In the present study interval sterilisations were performed in 80-90% of the cases (Table IV). Concurrent sterilisations were mainly done at S.R.N. Hospital

TABLE II
Comparison of Age Acceptability of the Three Groups

Age (Years)	S.R.N. Hospital %	District Hospitals %	P.H.C. %
20 and below	1.09	—	—
21-25	8.76	6.6	8.2
26-30	52.22	24.0	50.8
31-35	30.89	41.8	33.6
36-40	5.56	19.8	7.2
40 and above	1.48	7.8	0.2

TABLE III
Comparison of Parity of the Three Groups

Parity	S.R.N. Hospital %	District Hospitals %	P.H.C. %
2	4.36	9.5	3.6
3	21.38	21.9	21.0
4	26.78	25.3	27.6
5	23.26	24.7	27.6
6 and above	24.22	18.6	20.2

Allahabad so that the patients can report to the hospital immediately in cases of complications. Concurrent sterilisations may best be avoided under camp circumstances to avoid serious complications.

TABLE IV

Interval and Concurrent Sterilisation in Three Groups

Time of sterilisation	S.R.N. % Hospital	District Hospital %	P.H.C. %
Interval	80	99.27	99.05
Concurrent	20	0.70	0.15

Patients of controlled medical disorders and previous abdominal surgery were taken up for the procedure; 1 case each of diabetes mellitus and pulmonary tuberculosis non-toxic goitre and previous ovarian cystectomy, while 2 cases of previous caesarean sections underwent uneventful laparoscopic sterilisation.

Major complications occurred in camps (Table V).

In the present study there was difficulty in pneumoperitoneum in one case due to obesity but vaginal route was used and laparoscopy performed successfully. In 6 patients, adhesions were present and tubectomy could not be done. In the District Hospital series the procedure failed due to omental adhesions in 10 cases, tubovarian mass in 1 case, tuberculosis in one case and bilateral hydrosalpinx in 1 case. Thickened tube got cut in one and the procedure could not be performed.

Twenty-seven pregnancies were reported of which 18 were procedure failures and the rest were luteal phase pregnancies i.e. a failure rate of 1.02/1000, which was higher than that of Yoon (1977), but less than Lee and Raggish (1976), Burkman (1980) Mehta (1980) and Mehra (1980). The nil failure rates were observed in series where the total number of cases was less.

TABLE V

Comparison of Complications in the Three Groups

Complications	S.R.N. Hospital %	District Hospital %	P.H.C. %	Total %
Uterine perforation	1.08	1.19	1.00	1.09
Haemorrhage from mesosalpinx	0.09	0.07	0.10	0.09
Resected tube	0.09	0.08	0.25	0.14
Bleeding from omentum	—	0.01	—	0.003
Bleeding from ovarian/round ligament	—	0.05	0.01	0.02
Wound infection	—	—	0.10	0.003
Acute abdominal pain	—	—	0.15	0.05
Prolapse omentum	0.04	—	0.05	0.03
Laparotomy for Intraperitoneal haemorrhage	—	0.09	—	0.03
Bowel perforation	—	0.02	—	0.006
Neurogenic shock	0.04	0.05	—	0.03
Acute pulmonary oedema	—	0.007	—	0.002
Bronchospasm	—	0.01	—	0.003
Peritonitis	—	0.007	0.05	0.019
Death	—	0.007	0.05	0.019

