

ACCEPTANCE OF LAPAROSCOPIC LIGATION IN LAST DECADE

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SUMMARY

The present study was carried out in the Department of Obst. & Gynecology, K. G. Medical College, Lucknow in 42,275 cases from 1981 to April 1990. Out of 42,275 cases 25,892 cases were done in Dist. Hospital, 9,44 at P.H.C. and 6,639 in Queen Mary's Hospital, Lucknow. Four patients died during operation. The short term morbidity was insignificant. Remote complications were menstrual abnormality, Backache and Pelvic pain in 6% cases and failure in 0.56% cases.

Results showed that Laparoscopy is simple, safe, easy and permanent method of contraception provided the patients are selected properly and performed by expert hands.

INTRODUCTION

The most widely used contraceptive method in the World today is Voluntary Surgical Sterilization. Many methods of sterilization have come up from time to time. Laparoscopic sterilization was started in India in early 1970. Laparoscopic sterilization is probably the greatest breakthrough in contraceptive technology. Its acceptability, simplicity, safety and efficacy has made its popularity manifold, especially among rural population. The minimal hospital stay, morbidity and mortality have all added to its popularity.

MATERIAL AND METHOD

The present study has been undertaken in the department of Obst. & Gyn., K. G. Medical College, Lucknow. A total of 42,275 laparoscopic sterilization operations were performed from 1981 to April 1990, out of which 35,636 cases were carried out at various camps and 6,639 subjects had operation in the institution. The camps were organised in the neighbouring District Hospital, Primary Health Centre and Railway Hospitals. (Distance 20 to 40 Km.) The cases belonged to the age group of 20-40 yrs. and the parity ranged from 0-10.

Data evaluation for immediate, short and long term sequelae was carried out in 6,639

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cases in whom sterilization operation was performed in the Deptt. of Obst. & Gyn.

OBSERVATION AND RESULTS

Data analysis was carried in 6,639 institutional cases for immediate, short and long term sequelae of sterilization.

Demographic Characteristics

- (1) Residence : In first half of decade 58.7% women came from rural areas while in the 2nd half of decade 63% women were from urban areas (Table I).
- (2) Age : Age distribution did not exhibit significant pattern (Table II).
- (3) Education : About 50% of the patients were illiterate (Table III).
- (4) Parity : Maximum number of women had 3 or more living children. The number

of women with 2 living children increased from 12.9% to 25% (Table IV).

- (5) Religion : More than 90% were Hindus but in the 2nd half of decade, the no. of Muslim increased from 7% to 11% (Table V).
- (6) Timing : In the early part of the decade the women came for ligation only but in the mid & later part the female accepted ligation because they had to undergo MTP (Table VI).

COMPLICATIONS

- (1) Immediate : The most common complication encountered was surgical emphysema in 2.9% cases and the next being perforation of uterus. Four patients died during operation in last 10 yrs. Among them 3 deaths occurred in

Table I

Residence

	Rural	Urban	Total
	No. of cases	No. of cases	
1981 - 1985	2690 58.7%	1888 41.2%	4578
1986 - 1990	761 36.9%	1300 63%	2061

Table II

Age

	20 - 25	26 - 30	31 - 35	36 - 40	Above 40
1981 - 85	884 19.3%	2435 51.1%	904 19.7%	220 4.8%	135 2.9%
1986 - 90	369 17.9%	953 46.2%	530 25.7%	147 7.1%	62 3%

the camps (.008%) and one in the hospital (.15%). Three patients had sudden Cardio respiratory arrest probably due to vagal arrhythmia. One patient had bowel per-

foration followed by peritonitis. These deaths occurred in the year 1982-83.

An endeavour was made to follow up these women. During this period only

Table III

Education

	Illiterate	Primary	Secondary	College
1981 - 85	2554 49.23%	808 17.64%	906 19.79%	610 13.32%
1986 - 90	962 46.67%	257 12.46%	381 18.48%	461 22.36%

Table IV

Parity

No. of Living Children	1981 - 85	1986 - 90
1	7 (.15%)	2 (.09%)
2	594 (12.9%)	526 (25.52%)
3	1569 (34.27%)	755 (36.63%)
4	1316 (28.74%)	442 (21.44%)
5 & above	1092 (23.85%)	336 (16.30%)
	4578	2061

37.2% patients came for follow up.

(2) Short term sequelae : Infection of wound occurred in 12 cases, 24 cases complained of pain in abdomen.

(3) Long term sequelae : These were menstrual abnormality (1%), PID in (6%), Obesity in (1%) and failure rate (56%).

14 patients reported failure of ligation. The reasons for failure are shown in Table X. Out of these 14 patients, 2 opted for continuation of pregnancy & the rest had MTP. The interval between pregnancy & ligation varied from 9 months to one year.

Table V

Religion

	Hindu	Muslim	Sikh	Christian
1981 - 85	4191 91.54%	325 7.09%	57 1.24%	5 0.1%
1986 - 90	1814 88.01%	233 11.30%	9 0.43%	5 0.24%

Table VI

Timing

	Post MTP	Interval	Post Abortion	P. N. C.
1985	1957 42.74%	2597 56.72%	22 0.48%	2 0.04%
1990	1203 48.36%	842 40.85%	16 0.77%	—

Table VII

Complication of ligation during operation

	No. of Cases	%
Surgical Emphysema	1200	2.9
Tubal Transection	126	0.3
Uterine Perforation	300	0.7
Extraperitoneal Insertion	50	0.1
Double Ring Application	220	0.5
Trocar Injury to Bowel	2	—
Death	4	—

Table VIII

Short term sequelae

	No. of Cases	%
Infection of wound	12	
Pain in abdomen	24	
U. T. I.	1	
Bleeding P/V (After MTP)	—	3.7%
Vaginal Discharge	—	1.3%

Table IX

Long term sequelae

	Percentage
Menstrual abnormality	1%
P. I. D.	0.6%
Obesity	1%
Failure Rate	0.56%

Table X

Showing causes of failure

Causes of failure	No. of Cases
Luteal Phase Pregnancy	Nil
Wrong Identification	6
(a) Mesosalpinx	3
(b) Round Ligament	3
Incomplete Occlusion of Tubes	4
Post Partum	1
CuT Removal with MTP	1
	2
Ring Missing	4
Total	14

DISCUSSION

Laparoscopic sterilization is an inexpensive, safe and acceptable method. This can be seen with the changing trend in the acceptability over the last 10 yrs.

In the present study, the mean age of acceptors was 30.4 years. In the similar studies by Jamshedji and Pachauri (1980), Choudhary (1984) the mean age was found to be 30.2 years.

The percentage of women with two living children increased from 12.9 to 25% and acceptors with five or more children dropped from 29% to 13%, the mean parity in 1982 was 4 and decreased to 3 in 1988, the mean parity in other study was 3.9 (Choudhary 1984).

General percentage of illiteracy was found to be 45%. Most of the women coming from rural areas were illiterate. According to Jamshedji & Pachauri (1980), the illiteracy status was 34.7%. In the present study only 5-10% were graduate and post-graduates.

Majority of the women (70%) belonged to low socioeconomic status. Similar observations have been shown by Choudhary (1984) and Sathe et al (1981).

A gradual decrease of tubectomy cases seen at our Centre in last 10 years period is possibly due to the training of more Laparoscopic teams in the region and the regular camps at PHC. Similar trend has been observed by Dutta & Chakravorty (1978), Pati et al (1980).

Incidence of sterilization failure rate in the present series was 0.56%. In fact it is not possible to give correct incidence of sterilization failure of an institution as cases of other centres are coming to our hospital and cases of our hospital may be going to other institutions. In more than half (57%) patients reported failure within one year of tubectomy confirming the findings of Vassej et al (1983). Jasawalla et al (1986), reported that the failure

rate is higher during the first year after surgery than the subsequent period. It was seen that failure rate is higher when Lap. ligation is performed concurrent with MTP and in the Post Partum period. Our findings are also in agreement with Hughes (1977). One patient had cuT removal followed by Lap. ligation resulting in improper occlusion of fallopian tubes. This indicates the inflammation of tubes associated with intrauterine contraceptive devices which could be the cause of technical failure.

CONCLUSION

Over last 10 years the experience has shown that Laparoscopy is simple, safe, easy, permanent method of contraception provided the patients are selected properly and performed by expert hands. This can be seen by above study that whatever mortality occurred was in the years of 1982-83 and definitely the failure rate was reduced in later years. Thus it can be concluded that Laparoscopy has been accepted by the community.

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