

A SOCIO-CLINICAL PROFILE OF CASES OF LAPAROSCOPIC STERILIZATION PERFORMED AT INSTITUTION AND CAMPS

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ABSTRACT:

Research Question: What is the socio-clinical profile of cases of laparoscopic sterilization performed at the institution and camps.

Objectives: To study the (1) socio-clinical aspect of laparoscopic ligations.
(2) complications and the failure rate.

Study Design: Longitudinal study.

Setting: Females coming for sterilization at the O.P.D. and post-partum centre.

Participants: 9088 females of reproductive age group.

Study Variables: Age group, social class, residence, education, number of living children.

Outcome Variables: Proportion of women who came for sterilization, ligations performed at hospital.

Results: Demographic characteristics showed that 5658 (62.2%) and 3430 (37.8%) were from rural and urban areas respectively. Socio-economically, 80% cases belonged to low socio-economic class. As regards the literacy status, 5500 (60.5%) of the patients were illiterate and 2600 (28.6%) of them had received only primary education. The age group which commonly accepted sterilization in 5056 cases (55.6%) was 31-35 years. The parity in our study showing highest incidence of laparoligation. i.e. 36.17% was 5. Our complication rate was 0.5% and failure rate 0.6%.

Conclusions: Our experience of about 15 years shows that laparoscopic sterilization is a simple, safe, easy method and acceptable to the rural and even illiterate masses in this region. In the event of pregnancy, this permanent method is more acceptable.

Key words: Laparoscopic sterilization.

INTRODUCTION:

Laparoscopic sterilization now has an entrenched place in surgical gynaecology. Tubal

sterilization is one of the most frequently performed elective intra-abdominal surgical procedures in women of reproductive age. Laparoscopic sterilization with elastic silicone ring, developed by Yoon & King in 1975, is commonly performed. However, some reports highlighting complications have appeared in literatures.^{1,2}

MATERIAL AND METHODS:

This report deals with our experience of 9088 cases of laparoscopic sterilizations from 1982 till date in our Post-Partum Centre, Deptt. of Obstetrics and Gynaecology, J.N. Medical College, A.M.U., Aligarh.

In all the cases, inj. Atropine 0.6 mg, Diazepam 10 mg & Pentazocine 30 mg were given intravenously on the O.T. table. An infra-umbilical incision was made and Verries needle was introduced. Co₂ was used for pneumoperitonization. Trocar & cannula was introduced and fallopian tube was identified. A good loop was taken to apply Falope's ring. All patients were discharged 2-3 hours after the operation.

The distribution of cases is shown in Table I. Total number of cases done in the institution & the camps was 9088. Out of these, 5870 (64.6%) were done in the hospital & 3218 (35.4%) were done in the camp. The number of cases which were associated with early pregnancy were 5610 (61.77%) and 3478 were interval cases. 3218 (92.5%) interval cases were done in the camps & only 260 (7.5%) were done in the institution.

In our study, the age group which accepted the maximum laparoscopic ligation

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(55.63%) was 31-35 yrs followed by the age group of 26-30 yrs in which it was 26.7%. (Table II).

About 80% of the females belonged to low social classes IV and V (Table III). Table IV shows that 5658 (62.2%) of the women came from rural areas and only 3428 (37.8%) were from urban areas. Our study highlighted that 60.5% of the women accepting ligation were illiterate & 28.6% had received education in primary school. Only 4.6% were graduates. (Table V).

The females with parity of five or more had the highest rate of sterilization (36.27%) followed by a parity of 3 (31.27%) & then 4 (28.27%) (Table-VI).

Table No. VII shows the complications & their incidence in our study. The most common complication was pneumoperitoneum which was reported in 24 cases (0.26%). Pneumoperitoneum complications included pre-peritoneal emphysema & loculated pneumoperitoneum. This was followed by 13 cases (0.1%) of uterine perforation by uterine elevator. Haemorrhage from abdominal wound & rectus sheath was reported in 08 cases (0.1%). 2 cases of mesentric vessel injury occurred in our study. In the first case, haematoma was formed and was non-progressive, so the patient was conservatively managed. In the other patient, laparotomy was done. But after 8 hours, the patient's condition deteriorated and she expired. The overall complication rate was very low.

The failure rate in this study was 0.6% which is a negligible percentage. All the 6 cases which failed were associated with MTP. No failures occurred in the interval cases.

DISCUSSION:

Female sterilization in India is one of the major methods of contraception in the Govt. Family Planning Programme and about 14% of the married women of reproductive age group have availed of this facility of family planning³ so far.

In our study, out of 9088 cases, 5870 (64.6%) were done in the hospital and 35.4% in the camps. 92.5% of the interval cases were done in the camps.

The maximum age incidence was in the

age group of 31-35 yrs followed by the women in the age group of 26-30 yrs. The study conducted by Destefano et al¹ showed that maximum age incidence for the same was 25-34 yrs. Worldwide, the average age of women undergoing sterilization is in the 30's⁴.

Majority (80%) of the women belonged to low social classes. In our study, 60.5% of the females coming for ligation were illiterate and 28.6% had only primary education. According to Destefano et al.¹, the highest group (46.3%) was of high school/graduate level.

In the present study, women with 5 or more issues were 26.17%. Jassawala et al.² reported that the mean parity in their study was 3.7

The incidence of complications in our study was 0.5%. Khandwala S.D.⁵ reported overall complication rate of 17.8 per 1000, 98.7% of them being minor. Major complications rate was 0.24% per 1000. It was almost double in the camp i.e. 0.27 per 1000. Destefano et al.¹ reported it to be 0.16 per 1000 in hospital, i.e. a complication rate of 1.7% only.

In this study the failure rate was 0.6%. Jassawala et al.² reported that the failure was higher during the first year after surgery. Hughes⁶ reported that failure rate was higher when laparoligation was performed with MTP.

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TABLE-I:

DISTRIBUTION OF CASES ACCORDING TO INSTITUTION OF OPERATION

Type of Cases	No. of Cases	Percentage
Cases done in the institute	5870	64.6
Cases done in the camps	3218	35.4
Interval cases	3478	38.3
in camps	3218	92.5
in institution	0260	07.5
Early pregnancy cases	5610	61.7

TABLE - II:

DISTRIBUTION OF CASES BY AGE

Age Groups (yrs)	No. of cases	Percentage
20-25	410	04.5
26-30	2428	26.7
31-35	5056	55.63
36-40	0960	10.56
41 & above	0230	02.57

TABLE - III:

DISTRIBUTION OF CASES BY SOCIAL CLASS

Social Class	No. of Cases	Percentage
I	120	1.32
II	630	7.00
III	1162	12.8
IV	2860	31.5
V	4316	47.5

TABLE - IV:

DISTRIBUTION OF CASES BY RESIDENCE

Residence	No. of Cases	Percentage
Urban	3430	37.8
Rural	5658	62.2

TABLE - V:

DISTRIBUTION OF CASES BY EDUCATION

Education	No. of Cases	Percentage
Illiterate	5500	60.5
Primary	2600	28.6
Secondary	0568	6.2
Graduate	0420	4.6

TABLE - VI:

DISTRIBUTION OF CASES BY NO. OF LIVING CHILDREN

No. of living children	No. of Cases	Percentage
2	0390	04.3
3	2842	31.27
4	2568	28.27
5 & above	3288	36.17

TABLE - VII:

DISTRIBUTION OF CASES BY COMPLICATIONS

Complications	No. of Cases	Percentage
Lignocaine sensitivity reaction	09	0.10
Pneumoperitoneum complications	24	0.26
Perforation of uterus by uterine elevator	13	0.1
Haemorrhage from abdominal wounds / rectus sheath	08	0.1
Mesentric vessel complications	02	0.02
Penetrating injuries	00	0.00
Post-op Complications	05	0.05
- PID		
- Wound infection		
Peritonitis	00	0.00
Mortality	01	0.01