

# ANALYSIS OF A COHORT OF LAPROLIGATION CASES DONE AT KANPUR

by

SWADESH SHARMA

R. S. MISRA

AJAI BHAGOLIWAL

I. J. K. SONI

and

PRATIBHA ROHATGI

## SUMMARY

750 Cases of Laproscopic female sterilisation have been studied. The Highest number of cases fall in the age group of 25 to 29 years. Majority of the cases belong to the lower and lower middle socio-economic status. The highest number of cases were illiterate or just literate and large number of acceptors came from the rural areas. In the course of study it was found that majority (53.8%) of cases have 5 and above number of living children. No serious complication was reported except few which are traditionally associated with any surgical method. In the end few suggestions have been made to make this programme a success.

### Introduction

Various techniques for tubectomy have been given trial in recent years by experts in this field. Amongst these the laparoscopic method has been widely accepted and the number of female sterilizations performed has increased tremendously with the advent of this method. This is a safe and simple operation and reduces the convalescence period and discomfort of the patients (Suchdeva *et al* 1981). It has widened the horizon of tubal ligation. It is a great boon to a country like India where conventional

method can not be employed with great success due to widespread illiteracy. Yoon *et al* (1974) came out with silastic band technique for tubal ligation. At present this procedure of sterilisation is commonly adopted in a large number of countries with adequate follow-up to draw concrete conclusions to give comments with high hopes to overcome the gigantic problem of population explosion.

### Material and Methods

Seven hundred and fifty laproligation cases done at UISE Maternity Hospital, Kanpur in the year 1981 and 1982 have been studied. The cases have been classified according to various demographic variables. The follow-up procedure was

*From: Deptt. of Obstet. and Gynaec., G.S.V.M. Medical College, Kanpur.*

*Accepted for publication on 3-1-84.*

devised as a two stage process. First the patients were interviewed when they came to the hospital in immediate post-operative phase, for general check-up. In the second stage the cases were covered under the domicillary visit given by the trained workers in their respective areas. The domicillary visits were planned after 3rd month, 6 month and 12 month from the date of operation. The complications were noted down after the detailed check-up of the case. In some cases where domicillary visit was not possible due to some unavoidable reasons the follow-up was done through mailed questionnaire.

### Observations

Table I reveals that highest number of cases accepting laprologation fall in the age group of 25-29 years followed by 33% in the age group of 30 to 34 years and 18.4% in the age group of 35-39 years. 75.3% cases fall in the age group of 25 to 35 years. Table II deals with the socio-economic status of the acceptors determined by per capita income. 24.8% acceptors have per capita income below Rs. 50 per month and 27.2% cases fall in the income group of Rs. 50 to 60%. 19.7% fall in the range of Rs. 60 to 70 and 11.1% acceptors have per capital income per month between Rs. 70 to 80. The total 52% cases have below Rs. 60 per capital income per month. Table III shows that service and business class (33.6% and 34.9% respectively have more readily accepted laprologation followed by 16.2% formers and 15.3% labours).

Table IV shows the rural urban distribution of laprologation acceptors. 56.6% cases came from rural areas and

TABLE I  
Age-wise Distribution

Age	No. of cases	%age
15-19	—	—
20-24	12	1.6
25-29	317	42.3
30-34	248	33.0
35-39	139	18.4
40-44	30	4.0
44+	4	0.7
Total	750	100

TABLE II  
Education-wise Distribution

Education	No. of cases	%age
Illiterate	505	67.3
Literate	137	18.3
Primary	36	4.8
J. High School	42	5.6
High School	25	3.3
Graduate and above	5	0.7
Total	750	100

TABLE III  
Occupation

Occupations	No. of cases	%age
Farming	128	16.2
Labour	114	15.3
Services	252	33.6
Business and others	262	34.9
Total	750	100

43.4% had urban background. Table V deals with the number of living children of sterilised cases. 28.3% cases have 5 children and 27.3% have 4 children followed by 25.5% having 6 and above number of children respectively. Table VI gives the religion wise distribution in which 97.3% are Hindus, .7% Sikhs and 2% Muslim. Table VII elaborates the

TABLE IV  
Economic Status

Per capita income	No. of cases	%age
Rs. Below-50	185	24.8
Rs. 50-60	204	27.2
Rs. 60-70	148	19.7
Rs. 70-80	83	11.1
Rs. 80-90	72	9.5
Rs. 90-100+	58	7.7
Total	750	100

TABLE V  
Rural and Urban Background

Back ground	No. of cases	Percentage
1. Urban	326	43.4
2. Rural	424	56.6
Total	750	100

TABLE VI  
Number of Living Children

Children	No. of cases	%age
1	—	—
2	35	4.6
3	107	14.3
4	205	27.3
5	212	28.3
6		
and above	191	25.5
Total	750	100

TABLE VII  
Religion

Religion	No. of cases	%age
Hindus	730	97.3
Muslim	15	2.0
Christians	Nil	—
Sikhs	5	0.7
Total	750	100

educational status. 67.3% cases were found illiterate followed by 18.3% just literate. 4.8% and 5.6% acceptors were educated upto primary and Junior High School level and lastly only 4% cases had higher secondary or above qualification.

Table VIII which shows complications immediate and remote is the most significant area to be discussed and determines the acceptability of the method. Out of total 750 cases which have been followed up after laproligation do not give any major evidence of complications. The most common immediate complications which is found in 4.4% cases, is perforation of uterus, laceration of tubes and subcutaneous emphysema in 1.4% cases, ring dropped in peritoneum in .9% cases followed by complication of ring applied over round ligament (.8%). In the case of delayed complications 4.8% cases reported fever, .3% reported pelvic inflammation and pregnancy.

#### Discussion

Maximum acceptability of laproligation cases was found in the age group of 25-29 years followed by 30 to 34 years of age (75.3%). This is supported by Sud *et al* and Sheth *et al* (1981) and in other studies conducted for follow-up of sterilization. The group in which highest number of sterilizations are performed is ideal because lesser the age of acceptors more will be the number of births averted. In the case of socio-economic status the highest number of cases have per capita income either less than Rs. 50 to 60 per month. This shows that lower and lower middle socio-economic couples have started to realise the importance of small family size norm which has a fairly good representation in India's population composition. This acceptance may be attributed to short stay in the hospital

TABLE IX  
Complications

Complaints	No. of cases	%age
1. Subcutaneous emphysema	11	1.5
2. Laceration of tube	10	1.4
3. Transection of tube	1	0.1
4. Ring applied over round ligament	6	0.8
5. Ring dropped in peritoneal cavity	7	0.9
6. Bleeding from mesenteric vessel	3	0.4
7. Perforation of uterus	33	4.4
8. Injury to small bowel	1	0.1
9. Fever	36	4.8
10. Pelvic inflammation	2	0.3
11. Failure	2	0.3

after operation, simplicity of technique requiring less medication. Service and business class came forward in accepting laproligation because they have comparatively higher education, flexibility in views due to cross cultural values. The rural and urban back-group showed remarkable difference in acceptability amongst laproligation cases. Rural couples have accepted in good number as compared to the urban couples which is reverse in the other methods of tubectomy motivated by the family planning workers through intensive health education. The result indicates the need for organising antenatal, well baby, immunization and health clinics in which paramedical staff get opportunity to plan their contacts for regular education. The study reveals that 85.6% cases came forward for laproligation from the illiterate and just literate class. This percentage is proportionately represented in countries population. It is a healthy and ideal feature of this study and shall lead to the success of programme. The highest number of cases have 5 and more number of living children. This findings of the study needs deep thinking and partial changes in approach in the form of introducing

spacing methods to younger couples in order to check the increasing number of children at early ages. The last Table deals with complications immediate or delayed occurred in the course of laproligation procedure. The complications are negligible and Yoon *et al* (1977) rightly deserves the credit for this method. Fever, perforation of uterus (Suchdeva *et al* (1981) in 3 cases) are the main complications followed by laceration of tubes (1.4%) supported by Yoon *et al* 1977 (Suchdeva in 3 cases) (2%) and tubal transection is also reported in few cases by Yoon *et al* (1977) which is .1% found in our study. Ring dropped in peritoneum is reported in 7 cases (.9%) supported by Yoon *et al* (1977) in 11 cases along with 11 pregnancies were reported out of 2643. But only 1 case was entertained as failure of laproligation. Whereas in our study 2 pregnancies are reported out of 750 cases. Suchdeva *et al* (1981) and Sheth *et al* (1981) did not report any pregnancy.

In spite of the above encouraging reports the authors would like to strike a note of caution. The enormous increase in the number of acceptors have been due to the fact that this was a new

method and its wide publicity attracted the persons who were themselves conscious of small family size norm but were not satisfied with the present available methods. This present rate of increase may not continue if proper interpersonal communication by the field workers is not provided regularly to the hard cores amongst non acceptors.

The second important factor experienced by the authors, which may prove to be a pitfall is that administrative machinery has to gear itself to face new challenges which have arisen in the organisation of camps because the success of this method is highly dependent on the success of the camps in rural areas. The

timely guidance and supervision will bring the programme on the right track in due course of time.

#### References

1. Sheth, S., Verkey, A., Pachauai, S., Bhiwandiwalla, P. M., Motashaw, N. D. and Purandre, V. N.: *J. Obstet. Gynec. India.* 31: 52, 1981.
2. Suhdeva, I. K., Rajeswari, C. and Taneja, B. K.: *J. Obstet. Gynec. India.* 31: 82, 1981.
3. Sud, K., Saxena, P., Kapoor, S. and Hema, S. L.: *J. Obstet. Gynec. India.* 31: 72, 1981.
4. Yoon, I. B., King, T. M. and Parmley, T. H.: *Am. J. Obstet. Gynec.* 127: 109, 1977.
5. Yoon, I. B., Wheelles, C. R. and King, T. M.: *Am. J. Obstet. Gynec.* 120: 132, 1974.