# **MENSTRUAL SEQULAE OF TUBE LIGATION**

by

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Menstrual disturbances especially menorrhagia and dysmenorrhoea have been frequently reported with wide disparity (18%-32%) after female sterilisation. This disparity in the incidence is probably related to the different methodologies used by different workers. We have tried to evaluate this problem in our outdoor patients.

# Material and Methods

This is a prospective study from September 1978 to September 1979 at Lokmanya Tilak Municipal Medical College and Lokmanya Tilak Municipal General Hospital, Sion, Bombay 400 022.

Hundred and fifty patients who had undergone sterilisation sometime in the past and had attended our outpatient department for some complaint were reviewed. Each patient was evaluated by detailed interview and gynaecological examination regarding her physical, psychological and menstrual health, so as to note the change from the preoperative status. Symptoms were compared with their own previous health and menstrual pattern in order to fully understand the magnitude of such a change. Patients

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who had undergone tube ligation were also compared with the control group women matched for age and parity from the outdoor patients. Patients who were pregnant, lactating, using oral contraceptives, having I.U.C.D., having sterility, unmarried or non-parous were excluded from the control group.

# Obseravations

Table I shows incidence of normal and scanty menstruation in relation to age in both post sterilisation and control groups.

A total of 106 (70.6%) and 105 (70%) of the patients had normal or scanty menstrual pattern in post-sterilisation and control groups respectively. Incidence of scanty menstrual pattern was more or less same in both poststerilisation and control groups, except in the age group 31-40 years, where there was higher incidence of oligomenorrhoea in poststerilisation women. (5 patients i.e. 9.25% as compared to none in control group).

Table II shows the incidence of excessive menstrual pattern in relation to age A total of 44 (29.3%) and 45 (29.6%) cases had excessive menstrual pattern in post-sterilisation and control groups respectively. Incidence of excessive menstrual pattern was same in both the groups as a whole. However, when compared in relation to age, post sterilisation women showed higher incidence of polymenor-

	Incidence of Menorrhagia	following	tubectomy	
Dawn C.S.	1964	27.6 %		
Rakshit B.	1966	20.4 %		
Wagh K. V.	1966	31.00%		
Adatia & Adatia	1966	7.00%		
Shah & Kasbekar	1969	28.00%		
Gun K. M.	1971	27.4 %		
Chamberlain G. &	1978	36.00%	(Laparotomy	
Foulke J.			Sterilisation)	
		15.00%	(Laparoscopic	
			Sterilisation)	
Richard J. Stock	1978	6%	(Laparoscopic	
			Sterilisation)	1

TABLE I

rhoea (12.9% as compared to 5.12%) and menorrhagia (20% as compared to 14.8%) in the age groups 31-40 and 41-50 respectively.

Incidence of normal or scanty menstruation in relation to parity is shown in Table III. Higher incidence of oligomenorrhoea (5.68%) and hypomenorrhoea (3.4%) as compared to control group (Nil) was observed in parity group 4-6. Incidence of pathological amenorrhoea was higher in post-sterilisation women with parity 1-3 (11.7% as compared to 4.5% in control group).

Table IV shows break up of the cases of excessive menstruation in relation to parity. Higher incidence of polymenorrhoea (14.17%) and polymenorrhagia (9.09%) was observed in post-sterilisation women from parity group 4-6 as compared to control group. (Polymenorrhoea 9.09% and polymenorrhagia 3.03%) otherwise the incidence was more or less same in both groups.

#### Discussion

Most of the studies include follow up of sterilisation cases by questionaire or study of patients admitted in gynaecological wards for menstrual disturbances. Both these methods have their own falacies as follow up by questionaire is often incomplete and patients admitted in gynaec ward represent a selected group. In order to avoid this discrepancy, all the patients coming to gynaecological out patient department having history of tube ligation whether or not for menstrual complaints were interrogated and compared with random control sample matched for age and parity from the same outdoor.

Commonest disturbance observed was menorrhagia (14%), polymenorrhoea (10%) and polymenorrhagia (5.3%). Our low figures are perhaps related to our methodology of assessing a menstrual symptom after excluding all obvious factors such as age and parity which are likely to alter the menstrual pattern. Thus all cases of excessive menstruation encountered after tube ligation should not be considered as an after effect of this operation. With increasing age and parity greater number of patients are likely to have menstrual disturbances, irrespective of whether they have undergone tubeligation or not. To our surprise when a parallel study in a control group matched for age and parity was conducted it was observed that incidence of all menstrual disturbances was more or less same in

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both post-sterilisation and control group. When break up of the cases in relation to age and parity was studied in both the groups, it was observed that higher incidence of both scanty and excessive menstruation was present in age group 31-40 and parity group 4-6, especially in poststerilisation group. This may be due to effect of increasing age and parity on menstrual pattern.

Thus it is clear that many factors alter the menstrual health. One must, therefore, exclude all such factors before alloting a particular menstrual symptom to tubectomy. Any change in the menstrual pattern due to tubectomy cannot be well revealed unless one has a control study. (Matched for both age and parity).

# Summary and Conclusions

Preliminary comparative study of 150 women who had undergone sterilisation and random well matched control group of 150 O.P.D. patients, is carried out with special reference to menstrual complaints. Over all incidence of abnormal men-

strual pattern was more or less the same in post-sterilisation and control groups. Higher incidence of excessive menstruation was observed in age group 31-40 and parity group 4-6 especially in poststerilisation women.

We conclude that sterilisation is just an event in the history of these women and does not alter the menstrual pattern.

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