

EVALUATION OF FAILED STERILIZATION

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SUMMARY

A study of 44 cases of failed Sterilizations was carried out at Cama and Albless Hospital from January, 1981 to December, 1990. Fifty six percent of these patients had previous Sterilization done in Teaching Institutions. Of these 17 cases were done by Pomeroy's method; and 23 by laproscopic ligation; 4 cases by Medleners method. The paper discusses the various cases of failure and means to prevent them.

INTRODUCTION

Female sterilization in the widely accepted permanent method of contraception. However, it is associated with failure rate of 0.2 to 2.0 %, failure rate is known to vary as per technique as well as experience of the surgeon.

Pregnancy following sterilization could be due to following reasons :

1. Luteal phase pregnancy
 2. Development of tuboperitoneal fistula
 3. Spontaneous recanalisation of tubes
 4. Faulty surgical technique
 5. Error in identifying the fallopian tubes
- Though such cases are sporadic such failure

can result in social, financial, and psychological burden to the couple.

MATERIAL AND METHOD

44 cases who reported with pregnancy following sterilization from Jan. 1981 to Dec. 1990, were analysed at Cama & Albless Hospital, Bombay. Unless all the cases of failed sterilization report to the same institution where the surgery was done, institutional failure can not be worked out. In the present study information regarding time and place of surgery was gathered from patient herself or the discharge card. The pregnancy outcome and operative finding at the time of re-sterilization were studied. Sterilization conception interval varied significantly.

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OBSERVATION

Out of 44 cases, 16 were operated in puerperal period; 14 cases in the post abortal period; and 14 cases had interval sterilization. Out of 44 cases 2 were diagnosed and proved as ectopic pregnancy following laparoscopic and vaginal sterilization respectively. The interval between sterilization and ectopic pregnancy was 8 & 10 months respectively. Both required bilateral salpingectomy. 20 cases reported in early pregnancy and under-

went MTP by suction evacuation, followed by reesterilization, except 2 who refused it. Out of 8 cases reporting 2nd trimester, 6 were terminated by extraamniotic instillation and one by hysterotomy. One was diagnosed vesicular mole and required evacuation. All except one agreed for reesterilization.

12 women reported at advanced stage of gestation where termination could not be considered. All of them delivered at term vaginally

Table - I

Period	Total	Pomeroy's	Madlener's	Laparoscopic
Post Partum	16	12	4	-
Post Abortal	14	3	-	11
Interval	14	2	-	12
Total	44	17	4	23

Table - II

S-C Interval	Pomeroy	Madlener's	Laparoscopic	Total
Less than 6 months	-	-	3	3
6 - 12 months	3	1	9	13
12 - 24 months	1	2	3	6
more than 24 months	13	1	8	22
Total	17	4	23	44

Table - III

Place of Surgery	Pomeroy	Madlener	Laprosopic	Total
* Govt Hospital in Maharashtra	7	3	5	15
* Teaching Institution	8	1	15	24
* Family Planning centre in BMC	2	-	2	4
* Sterilization Camps	-	-	1	1
Total	17	4	23	44

except one who required LSCS. 4 women refused re-sterilization as husbands were willing for vasectomy.

I. Laparotomy Findings

12 out of 16 primary sterilization were done by Pomeroy's method and 4 by Madlener's method. 5 out of 17 cases of Pomeroy's method were done perfectly. In them no obvious cause of failure was observed. 5 women refused sterilization, and one had ectopic pregnancy. Loose ligature was seen in two, ligature on round ligament in one and bilateral free tubes without any sign of surgery in 3.

Out of 4 cases with Madlener's both tubes

- * Band applied on round ligament3
- * Band on Ovarian ligament1
- * Band mesosalpinx1
- * Incomplete occlusion of tube1

5 cases showed bilateral evidence of sterilization failure. Total 11 women refused re-sterilization in our study.

II. Sterilization Conception Interval

In our series S-C- Interval varied significantly. Shortest interval noticed was one and half months, and the longest interval was 8 years (see Table II) 75% of cases were reported within 6 months to 24 months and had laparoscopic sterilization done 65% of those who reported after 24

Table IV

Name of the authors	Total	Tech. Failure	In correct Tech.	Indeterminate Causes
Present series	44	8	18	11
Bombay 1991	14	3	6	3
Mittal Sunita	14	3	6	3
Delhi 1982				
Kurtadkar	62	13	38	1
Aurangabad 1984				
Goel Neerja	11	3	8	-
Delhi 19835				
Parikh Vccrabala N.	15	4	10	1
Solapur 1987				

were free with ligature on round ligament in 2, partial occlusion of tubes due to loose ligature in 2.

12 out of 14 interval sterilization had laparoscopic banding of the tubes (see Table I). In all 23 women had laparoscopic sterilization of whom 1 had ectopic gestation, and 6 had refused re-sterilization. In rest of the cases findings were as follows :

- * Unilateral application of band6

months had abdominal sterilization.

III. Place of Surgery

It was observed that 56% of these women had their previous sterilization done in teaching institution in Bombay. Sterilization surgery is considered the most simple surgery, hence it is done by junior residents, perhaps with inadequate supervisions.

DISCUSSION

Causes of failed sterilization in our series were compared with causes reported by other authors (See Table IV) :

In correct identification of tubes during surgery was responsible in 60% of failure in each series. Incorrect technique was observed in 1/3 of the cases by all authors. Those in whom laparotomy was not done due to refusal of re-sterilization or those where sterilization technique was correctly done and cause of failure could not be determined are included in indeterminate causes of failure.

Fear and loss of faith in the sterilization technique was the major reason for refusal of re-sterilization by patient herself or her relatives.

Failures depend on

- 1 - training & experience of the surgeon
- 2 - proper selection of cases in post menstrual phase for interval sterilization.
- 3 - leakage of gases and improper intensity of light in laparoscopic equipment.
- 4 - mobility of the uterus and adnexa for

proper visualization of tubes during laparoscopic sterilization.

- 5 - obesity and approachability of tube.
- 6 - ligature and banding at proper site of the tube. Failures are less common if tubes are lifted at 3-4 cm from cornual end.

Sterilization surgery being one of the methods of National Population control programme, should be done very carefully by senior surgeons or if done by residents it must be under supervisions of senior and experienced surgeons. Many such failures can defame the National family Planning policy.

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