

TUBAL LIGATION FAILURES WITH FIMBRIECTOMY

by

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Introduction

Female sterilization is a popular method of permanent contraception in India. In recent years about 6 million women have undergone sterilization operations. Besides others post operative complications, failure of tubal ligation causes lot of anxiety among the sterilized women as well as loss of confidence in the prospective acceptors of tubal ligation.

The effectiveness associated with different techniques of sterilization has not been worked out so well since all these techniques are not used with equal frequency. Modified Pomeroy's techniques has been the most commonly used procedure and its failure reported in various series is between 0.3 to 2.0 (Fort and Alexander, 1966, Adams, 1964). Vaginal tubal ligation has been a popular method in some of the Institutes in India in the last decade. In Department of Obstetrics and Gynaecology at Postgraduate Institute of Medical Education and Research, Chandigarh, about 40 per cent of the sterilization procedures during this

period have been performed by the vaginal route. In a small percentage of cases, since it was not possible to ligate the tube/tubes by Modified Pomeroy's technique because of certain technical difficulties, fimbriectomy was resorted to. The present study presents the data regarding cases who reported following tubal ligation failure at this Institute.

Material and Methods

In all, 27 cases reported with tubal ligation failure. Twenty-one of these had tubal ligation operation in the Institute between January 1973 and December 1976. The remaining 6 had been operated elsewhere. The data for all the tubal ligations done in this hospital during this four years period was collected and analysed. It was not possible to collect information regarding the technique of operation in the 6 cases who had been operated in other hospitals.

Results

In a total of 2024 tubal ligations done during the above mentioned period, abdominal tubal ligation was done in 1180 cases (58.3 per cent) and rest (41.7 per cent) had vaginal tubal ligation. Modified Pomeroy's ligation was the operation of choice and was employed in 94.2 per cent cases. Fimbriectomy operation was performed in 5.8 per cent cases and only

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when technically it was not possible to perform Modified Pomeroy's operation.

Data regarding 21 tubal ligation failures is shown in Table II. Sixteen cases had vaginal tubal ligation and 5 had abdominal tubal ligation. In 10 cases Modified Pomeroy's technique had been employed while 11 cases had tubal ligation by fimbriectomy.

The ligation failure interval ranged from 6 months to 52 months. There were only 2 cases who reported within 6 months, 61.9 per cent had a failure after 12 months and 28.5 per cent had more than 24 months interval.

Discussion

It has been observed by many workers (Proystowsky and Eastman 1955 and Cheng *et al*, 1977) that vaginal approach carries a greater risk of failure than abdominal route. The present study confirms this finding. Garb (1957), on the other hand, observed the same incidence of failure by both vaginal and abdominal routes. Over the 4 years period under study it was observed that fimbriectomy operation was employed only in 5.8 per cent cases which comprised of 12.1 per cent of all vaginal tubal ligations. Amongst the tubal ligation failures, 11 (52.4 per cent) had fimbriectomy. Cheng *et al* (1977) have reported a high rate of 3.2 per cent failure for fimbriectomy operation. It was speculated by them that after this operation since the rest of the tube is intact and infundibulum is large, the chances of regeneration are more and thus chances of failure after fimbriectomy are greater. Kroener (1969) claimed that there was no failure after fimbriectomy in 1000 cases with 75 per cent follow up and 200 of these cases had been followed for 10 years. Tappem

and Kroener (1973) in his study with fimbriectomy had only 0.9 per cent failure rate which also was thought to be technique failure rather than method failure. Taylor (1972), on the other hand, reported 6 pregnancies in 200 women who were subjected to fimbriectomy.

The ligation failure interval was more than 12 months in 61.9 per cent cases and more than 24 months in 27.5 per cent cases. This is quite in contrast to the study of Cheng *et al* (1977) whose overall failure rate rose very rapidly, with a peak at 3-6 months period following the operation and then a gradual decline over the next 24 months. Tappem and Kroener (1973) followed cases for 6 months and reported 0.9 per cent failure rate. The authors feel that 6 months is too short a period to find out the failure rate after tubal ligation since in the present study the ligation failure interval was more than 12 months in 90.4 per cent cases.

It is thus felt that further studies are required to find out the reliable effectiveness of fimbriectomy operation since the information available at present is so meagre that no conclusion can be drawn.

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