

VAGINAL STERILISATION

(A Study of 123 Cases)

by

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With the rapid growth in population, tubal sterilisation, during the past three decades has become a major part of the National Family Planning Programme. Puerperal sterilisation has widely gained acceptance as a safe and simple method of permanent contraception in our country. In the non-puerperal women, however various techniques to perform sterilisation are being developed. Vaginal sterilisation as a procedure in the non-puerperal women, has been increasingly used for the past 8 to 10 years. This paper is a study of 123 cases of vaginal sterilisations performed, during a 3 year period (1973 to 1975) at the Christian Medical College Hospital, Vellore, Tamil Nadu.

Material and Methods

From 1973 to 1975 (3 year period) in the Department of Obstetrics & Gynaecology of the Christian Medical College Hospital, Vellore, 3380 tubal sterilisations were performed, out of which 123 women had vaginal sterilisation. The incidence of vaginal sterilisation was 3.6 per cent of the total sterilisations. A study of the 123 cases, who underwent vaginal sterilisation, pertaining to their age, parity, concurrent diagnosis, complications and follow-up has been undertaken.

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In 52 per cent (64 cases) a general anaesthetic was given, and 39 (48 cases) and 9 (11 cases) per cent had spinal and epidural anaesthesia respectively. No case was done under local anaesthesia. The operative procedure was performed in the lithotomy position, and as described by Poddar (1972). In 73 patients, a medical termination of pregnancy, by suction curettage, and in 23 patients an evacuation was done along with the sterilisation. Eight patients had a Manchester operation for genital prolapse, with the sterilisation. All the patients were given prophylactic antibiotic cover post-operatively. Mostly a course of Sulpha (Sulphadimidine) or Streptomycin and Penicillin for five days was given. Some of the patients in whom infection was suspected during surgery were given tetracyclines.

Observations

Age

Table I shows the distribution of the cases according to their age group. The

TABLE I
Age Incidence

Age (Years)	No. of Cases	Percentage
20-24	10	8.1
25-29	34	27.6
30-34	40	32.5
35-39	26	21.1
40 and above	13	10.5

maximum number belonged to the age group of between 30 to 34 years, being 32.5 per cent (40 cases). It was noted that vaginal sterilisation was accepted in the higher age group. Only 35.7 per cent (44 cases) were below 30 years.

Parity

The maximum number of patients were grand multiparae (5 or more deliveries), being 43.9 per cent (54 cases). Only 32 women (26.7 per cent) were Para 3 or less. It was further noted that most of the low parity patients, had vaginal sterilisation because of medical or gynaecological problems, or were the wives' of a second marriage, with a already existing family. Table II shows the parity of the

TABLE II
Parity Distribution

Parity	No. of Cases	Percentage
1	2	1.6
2	15	12.1
3	15	12.1
4	37	30.0
5 and above	54	43.9

patients who underwent vaginal sterilisation.

Concurrent Diagnosis

It was seen, that 59.2 per cent women (73 cases) were pregnant, and had come

for a medical termination of pregnancy. The duration of pregnancy was between 6 to 12 weeks (Calculated from the L.M.P.). Another 18.7 per cent (23 cases) had an incomplete abortion or retained products of conception, for which they were admitted, and accepted vaginal sterilisation. Eight patients (6.5 per cent) had vaginal sterilisation along with a Manchester operation for genital prolapse, and one patient had repair of a third degree perineal tear. In this study only 18 (14.6 per cent) women had vaginal sterilisation for multiparity per se, and were not pregnant, out of which four women had loop menorrhagia, and had removal of the IUD and vaginal sterilisation. Table III shows the concurrent diagnosis of the cases who had vaginal sterilisation.

History of Attempted or Induced Abortion

Twenty-four (19.5 per cent) patients gave a definite history of attempted or induced abortion of the present pregnancy, and another 9.7 per cent (12 cases) had induced abortion of their previous pregnancy. These findings suggest the need for permanent contraception.

Complications of Vaginal Sterilisation

Haemorrhage was seldom a complication, and no case required blood transfusion.

TABLE III
Concurrent Diagnosis

Concurrent Diagnosis	No. of Cases	Percentage
Normal pregnancy (6 to 12 wks)	67	54.4
Pregnancy with Medical disease	6	4.8
Incomplete abortion/RPC	23	18.7
Genital prolapse	8	6.5
Complete perineal tear	1	0.8
Multiparity	14	11.2
Multiparity with IUD	4	3.2

sion. The average stay in the hospital after surgery was four to seven days, excluding the patients who underwent Manchester operation, which was 12 to 14 days. The mortality was nil. The most common complication was post-operative pyrexia, which lasted for two to four days. These patients were closely watched. As the patients were already on prophylactic antibiotics, no further treatment was administered. The longest hospital stay was 24 days, in a patient who developed pelvic cellulitis, after a suction termination of pregnancy, and vaginal sterilisation. She was treated with antibiotics, and was discharged after the infection was controlled.

Rectal injury occurred in two cases (1.6 per cent). In one, the sterilisation was completed, and then the rectum was repaired. In the other case the rectal injury was sutured first, followed by an abdominal sterilisation. The rectal repair was satisfactory in both the cases. In two cases (1.6 per cent), vaginal sterilisation was not completed, in one it was due to rectal injury as already mentioned. The other case had tubal adhesions due to an IUD in-situ of five years duration.

One patient was re-admitted 9 days after discharge. A medical termination of pregnancy and vaginal sterilisation had been done. The abortion was incomplete, and she responded to an evacuation after re-admission. Table IV shows the complications of vaginal sterilisation.

Late Complications and Follow Up

Only 80 women (64.5 per cent) reported for post-operative check up, or attended the gynaec. outpatients' department at any time after the vaginal sterilisation. There were no failures after the sterilisation. In 2 patients there was scar tenderness on vaginal examination, but they did not complain of dyspareunia. Four cases reported with menorrhagia, 12 to 24 months after the operation, out of which one patient (40 years old) had a diagnostic curettage. Most of the women had no complaints, and were satisfied with the vaginal sterilisation.

Discussion

From the preceding observations, it can be inferred that vaginal sterilisation is more acceptable in the older (above 30 years) and high parity women (Para 4 and above). Rao and Ghouse (1972) also found the average age of the women who underwent vaginal sterilisation to be 29.8 years, and their average parity was 4.4. There was a high incidence of 43.9% of grand multiparae in the study group as compared to the incidence of 12 to 14% in the hospital. Rao and Ghouse (1972) also found 40.26 per cent of grand multiparae in their series as compared to 34.9 per cent of their controls. This method of sterilisation can be effectively performed with a vaginal termination of pregnancy, as borne out in this study. Sen Gupta *et al*

TABLE IV
Complications of Vaginal Sterilisation

Complications	No. of Cases	Percentage
Post-operative pyrexia	20	16.2
Rectal injury	2	1.6
Pelvic cellulitis	1	0.8
Failure to complete the operation vaginally	2	1.6
Pregnancy	Nil	Nil

(1976) also concur with this view. In the study of Rao and Ghose (1972) only 6.6 per cent of the women who had vaginal sterilisation were concurrently pregnant, but in this study 59.2 per cent (73 cases) were concurrently pregnant, and another 18.7 per cent (23 cases) had an abnormal first trimester pregnancy.

The main complications in this study were pelvic infection (1 case), rectal injury (2 cases) and failure to complete the sterilisation (2 cases). These complications have been reported by other authors also (McMaster and Ansari, 1971; Rao and Ghose, 1972; Poddar, 1972; and Sen Gupta *et al* (1976). With proper selection of cases and operative care, they can be avoided or minimised.

In conclusion, vaginal sterilisation is well suited for the women who desire an interval sterilisation or have an unwanted early pregnancy, as in the latter case, both procedures can be concurrently performed vaginally. The post-operative recovery is quicker both physically and psychologically, in these patients, as compared to an abdominal approach (Rao and Ghose, 1972; and Gupta *et al*, 1976). The simplicity of the operation and instruments, also lends support that it can be performed in a

large number of hospitals, once the technique is learnt.

Summary

A study of 123 women who underwent vaginal sterilisation, in the Department of Obstetrics and Gynaecology, Christian Medical College Hospital, Vellore during the past 3 years (1973 to 1975) has been made. The morbidity associated with the operation has been studied. The mortality was nil, and no failures were noted after the procedure. Vaginal sterilisation was found to be a safe and acceptable operation in the non-puerperal women.

Acknowledgement

I am grateful to Miss Ruby Joshua, for typing the script.

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