# VAGINAL STERILIZATION

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Preference for different contraceptive methods may differ, but the fact remains that contraceptive measures are necessary for family planning both in the interest of the family and the nation.

Condoms, jelly, vaginal diaphragms and I.U.D. are common measures. The 'pills are being used by many. Recently stress has been laid on vasectomies and tubectomies. Stress has been put on female sterilization for evident reasons. It has a definite place in the multiparous woman, and is a sure and economical measure. The majority of women are under the impression that female sterilization can be done in the post-partum period only and they are ignorant about sterilization in the non-pregnant state, particularly about the vaginal steriliza-Vaginal sterilization is not only easy but psychologically less disturbing to the patient, because there is no abdominal incision. This they consider a less serious operation, because the abdomen is not opened. Those who could not make up their mind about sterilization at the time of delivery can still get it done at their convenience before they conceive again.

The role of gynaecologists in the General Hospital is not only to do the maximum number of tubectomies, but to minimise the morbidity and reduce the hospital stay of the patients. With this in mind vaginal sterilizations were performed in suitable cases. Between 1st January 1965 and 31st March 1969, 38 vaginal sterilizations have been done in my unit only and a few in my private clinic. Actually vaginal sterilization for the sake of sterilization was done from September 1967. Between 1st January 1965 and September 1967, 5 Fothergill operations were done with vaginal sterilization. To be able to include these five Fothergill operations with sterilizations for comparitive study, the period from 1st January 1965 to September 1967 is included in this study.

All the sterilization were done for multiparity, 4th para and above.

Table I shows that only three were done between the age of 25 and 29 years and none were done below that age. Twenty were done between the ages of 30 years and 34 years and II were done in the age group of 35 to 39 years indicating that multiparity, was the only indication for the vaginal sterilization.

Out of 38 vaginal sterilizations, in twenty some form of associated surgery was done (Table II), in the re-Received for publication on 20-9-1969. maining 18 cases only vaginal sterili-

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TABLE I Age-wise Classification

Total Number	20-24 years	25-29 years	30-34	35-39 years	Age not men-tioned
38	Nil	3	20	11	4

TABLE II						
Associated	Surgery	with	Vaginal	Sterilization		

Evacuation for incom- plete abortion	Remo- val of loop	Fothergill op. with anterior approach	Fothergill op. with posterior approach	Dilata- tion and curettage	Excision of perineal sinus
5	6	5	2	1	1

zations was performed. Thus in 55.5% of the cases of vaginal sterilization some form of associated surgery was done. In five cases of evacuations, for either incomplete abortion or inevitable abortion with profuse bleeding pervaginam vaginal sterilization was done. There was no case of therapetuic abortion in this series. In six cases the loop was removed because of heavy or continuous bleeding.

# Duration of Stay

All cases who had no associated surgery were discharged in five days. Those who had major surgery, like Fothergill operation, stayed for twelve to fourteen days. Three patients were readmitted with pain in the abdomen and temperature due to pelvic infection. One had a diagnostic curettage, the other had the loop removed and the third had only vaginal sterilization. Two responded very well to antibiotics and were discharged in a few days but one who had the loop removed and vaginal sterilization done had a long stay.

In the first five cases of vaginal sterilization with Fothergill operation

the tubes were aproached through the vesicovaginal space. The morbidity in these cases was high, all had lower abdominal pain, fever and dysuria. In the other two sterilizations with Fothergill operation; the approach was through the pouch of Douglas, through a separate incision and the post-operative period was uneventful.

## Selection of Cases

To avoid post-operative complications and to reduce the morbidity rate it is essential to select the cases properly. (1) Cases with pelvic infection should be eliminated or treated adequately, as otherwise the infection may flare up in the postoperative period or approach to the tubes may be difficult due to adhesions. (2) In. cases of very deep vagina and deep posterior fornix the approach becomes difficult and these patients are better dealt with through the abdominal route. (3) Patients with menstrual disorders, like menorrhagia or polymenorrhoea should preferably not have vaginal sterilization, because these cases may require hysterectomy.

# Technique of Vaginal Sterilization

The operation is done under spinal anaesthesia. The approach is through the posterior fornix. The cervix is steadied with a vulsellum and the vaginal mucous membrane is held with two Allis' forceps one behind the other where it reflects over the pouch of Douglas from the cervix. It is divided longitudinally at right angle to the Allis' forceps and the peritoneum is opened separately. The pouch of Douglas and the peritoneum in the multiparous women is so lax that the blade of a small Sim's speculum can be easily introduced into the pouch after the peritoneal cavity is opened. By turning the other end of the Sim's speculum towards the pubic symphysis the body of the uterus can be easily manipulated, while the cevix is steadied by the vulsellum. By swinging the uterus to one side by the blade of the speculum, the adnexa of the opposite side is brought into view very clearly. Fort and Alexander (1966) from the department of Memphis Hospital, Tenesse, have

a uterine sound through the cervix into the uterine cavity. With the sound in the uterus fundus can be swung on to one side bringing the addnexa of the opposite side in view." The author's technique of swinging the uterus to one side by Sim's speculum is very easy and brings the adnexa into view very clearly and easily. This is a very important step of the operation, otherwise a great deal of time is wasted in searching for the tubes. If this procedure is carried on with a good spot light and Trendelenberg position the operation does not take more than 5 to 10 minutes.

After the tubes are visualised the tube is lifted with a long non-tooth dissecting forceps and nearly two to three milimetre of the tube is crushed, divided and ligated. The peritoneum of the pouch of Douglas and the vaginal mucous membrane are stitched separately with No. I chromic catgut. The vagina is not packed and the patient is up and about the very next day.

TABLE III
Morbidity Rate

	No. of patients	Failure rate.	Morbidity rate.	Fort & Alexander
Vaginal sterilization only	18	Nil	5.5%	3.3%
Fothergill op. & vaginal steriliza-				
tion through ant. approach	5	Nil	all 100% had pain, temp. & dysuria	18% with ant. & post colporr- haphy.
Fothergill op. & vaginal steriliza-				
tion, posterior approach	2	Nil	Nil	
D. & C., evacuations & other minor surgery	13	Nil	14.5%	. 3

reviewed 100 cases of vaginal sterilization by Pomeroy's method in 1966, and they state "the easiest method to bring the adnexa in view is to insert

The morbidity rate reported by Fort and Alexander 1966) is 3.3% while ours is 5.5% which is higher, possibly because ours is a small series.

It is obvious from Table III that if additional surgery is done the morbidity increases. They quoted 18% morbidity when an additional anterior and posterior colporrhaphy was done, but when cervical conization and dilatation are done in addition to the vaginal sterilization morbidity remains the same. The author found that the morbidity increased even when minor surgery was associated with the vaginal sterilization.

# Comments

Vaginal sterilizations are being done in big hospitals with encouraging reports. 1. The operation is easy and takes only 5 to 10 minutes. 2. The stay in the hospital is reduced to half as compared to patients who have abdominal sterilization. 3. There is no abdominal scar after the operation. 4. Post-operative pain is less. 5. Vaginal sterilization can be done 10-12 weeks after delivery when the uterus is well involuted and the tubes can be easily approached by the vaginal route. 6. When vaginal sterilization is to be done with a Fothergill operation the approach should be through the pouch of Douglas through a separate incision and not through the vesicovaginal space, as with the posterior approach the morbidity rate is low. Sheth and Batliwala (1968) have published a series of 160 cases from the K.E.M. Hospital, Bombay, and the advantages elicited by them are the same as mine.

To conclude, vaginal sterilization is a great asset in the over crowded Government Hospitals and should be given a fair trial by experienced gynaecologists.

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