

UNPLEASANT SEQUELAE OF FEMALE STERILIZATION

by

MALINI A. DESHMUKH,* M.D.

SHOBHA J. JOGLEKAR,** M.D.

CHANDANI M. ALWANI,*** M.D.

and

SHASHANK H. SHAH,† M.D.D.G.O.D.F.P.

Female sterilization has become a widely practised and acceptable procedure in our country. It is imperative that such a commonly practised operation should be safe, effective, acceptable and should not leave behind unpleasant sequelae. These operations are now being performed on a large scale in camps at district places. Quite often, surgeon himself is not aware of the serious consequences which may follow the operation as these patients visit other doctors for their complaints.

In this paper, an effort is made to out-

line some unpleasant sequelae following female sterilizations and suggestions made to prevent them.

Material and Methods

There were 1000 sterilization operations done in the Obstetrics & Gynaecology Department of K.E.M. Hospital during the 3 years from 1st August 1972 to 31st July 1975. Out of these, only 458 i.e. 45.8% cases came for follow-up. The follow-up period varied from 1 month to 3½ years. Symptoms like leucorrhoea, backache, pain in abdomen

TABLE I
Method of Sterilization

Method	Total	Mad- lener	Pomeroy	Tantallum clip	Yuchida	Lateral salpingectomy
Abdomi- nal	367	298	2	61	6	—
Vaginal	91	89	1	—	—	1
Total	458	387 84.2%	3 0.65%	61 13.1%	6 1.2%	1 0.22%

*Hon. Associate Professor.

**Hon Professor.

***Asstt. Professor.

†Registrar.

Department of Obstetrics & Gynaecology
K.E.M. Hospital and Seth G.S.M. College,
Parel, Bombay 400 012.

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which could not be directly related to the operation were not considered. No positive relationship between age, parity and incidence of complications was found.

Table I shows the different methods of sterilization used in this series.

The abdominal route was used in puerperal sterilizations while the vaginal route was used following abortions or for interval sterilization.

Table II shows the unpleasant sequelae in this series.

TABLE II
Clinical Pathology

	Present series 458 cases	Adatia 1156 cases	Shah 98 cases	Dawn 42 cases
1. Adhesions & hydrosalpinx	9	—	—	28.5%
2. Tubo-ovarian mass	3	18	—	—
3. Acute abdomen	3	—	—	—
4. Menorrhagia	19	—	28%	55%
5. Incisional hernia	6	—	2	—
6. Faecal fistula	1	—	—	—
7. Prolapse of fimbrial end of tube	3	—	—	—
8. Failures	26 (5.6%)	5 (0.43%)	—	—
9. Madlener's Tantalum clip	16 10			

Adhesions and Hydrosalpinx

Laparoscopic examination was done in 120 patients. Nine cases with hydrosalpinx were detected. There were bands of adhesions extending from omentum to parietal peritoneum. One of these cases was severe enough to need laparotomy to relieve adhesions. All these cases were done by Madlener method. This complication was not seen in sterilization cases done by Tantalum clips.

Tubo-ovarian Masses

There were 3 cases in this group. None responded to usual conservative treatment of antibiotics and short wave diathermy. One is already operated upon and the other 2 are awaiting surgery. All had Madlener's method of sterilization per vaginum.

Acute Abdomen

Three patients presented with symptoms of acute abdomen, and had to undergo emergency surgery. In all the 3 cases twisted hydrosalpinx was detected as the cause of acute abdomen, all had

Madlener's method of sterilization done by the abdominal route.

Menorrhagia

Nineteen patients complained of menorrhagia. Out of these, 3 required hysterectomy for the same. In all the 3 cases, menorrhagia had started within 6 months of tubal surgery.

Incisional Hernia

There were 6 cases of incisional hernia, all following midline vertical incision.

Faecal Fistula

In 1 case, vaginal sterilisation was done after septic abortion. Postoperatively, there was an acute exacerbation of her pelvic infection. Her general condition deteriorated rapidly despite adequate

conservative management. Emergency laparotomy with hysterectomy and bilateral excision of tubo-ovarian masses was done. The patient recovered but developed faecal fistula which closed subsequently with conservative treatment.

Prolapse of Fimbrial end of the Tube

This occurred in 3 cases after vaginal sterilization. These patients complained of persistent white discharge.

Failures

There were 26 failures, 16 patients came back with pregnancy, while in remaining 10 cases the tubes were found to be patent on laparoscopic examination. Out of these 26 failures, 16 were following Madlener's method, and the remaining 10 were following Tantallum clip application.

Thus, the failure rate in present series works out to be 5.6%; with Madlener method 4.1% and with tantallum clip 16.3% which is very high.

Discussion and conclusions

Though the mortality rate following tubal ligation procedure is almost negligible, the same cannot be said about morbidity.

Acute abdomen due to torsion of hydrosalpinx needs emergency surgery. If not treated promptly and adequately, it may produce further serious complications.

Another complication is pelvic inflammatory disease and formation of tubo-ovarian masses. Shah & Kasbekar (1969) (refer Table II) encountered 2 cases of tubo-ovarian masses in their 98 cases followed up. Adatia and Adatia (1966) reported 18 cases of pelvic inflammatory disease in their 1156 cases.

Hydrosalpinx is another frequently seen complication after sterilisation.

Dawn (1966) reported hydrosalpinx with adhesions in 28.5% cases as against a 5% in a matched control group. Chakravarty (1966) reported hydrosalpinx in 8 out of 105 sterilization cases. However, none needed emergency surgery.

As regards menorrhagia Shah and Kasbekar (1969) (refer Table II) found the incidence to be 28% and Dawn (1966) 55% in post-sterilization cases.

Dawn (1966) suggested that menorrhagia is due to hydrosalpinx with adhesions and not due to interference with ovarian blood supply. Although in the present series, there were 19 cases of menorrhagia, 3 cases came within 6 months, suggesting cause and effect relationship. There was no hydrosalpinx present in these 3 cases.

Shah and Kasbekar (1969) noted 2 cases of incisional hernia both following vertical midline incision. Adatia and Adatia (1966) did not find a single case of incisional hernia in their series of 1156 cases. The incision used by them was a transverse suprapubic. In the present series, there were 5 cases of incisional hernia. This being a minor operation, closure is often undertaken casually. Transverse incision and closing the abdomen in proper layers is a safeguard against this complication.

Development of faecal fistula is a very rare complication. Although it was not directly related to the sterilization operation, this could have been avoided if the surgeon had not taken up the patient for sterilization soon after septic abortion.

Failure rate as generally quoted ranges from 0.4 to 2.9%. Haynes and Wolfe (1970) reported 9 failures in 436 cases using Madlener's method. In the present series failure rate of 5.6% is rather high, 10 of the failures were detected on laparoscopic examination. No foolproof method

is still within sight.

Since most of the sterilization operations are performed by junior surgeons, it is necessary that they are taught the proper technique of operation. Due importance should be given to prevent haematoma, laceration of tissues and manoeuvring should be as gentle as possible. Incision should be transverse if possible and sutured in layers.

Scrupulous aseptic precautions must be observed to keep the morbidity low. Case selection must be judiciously done. Better methods of follow-up must be developed to detect unpleasant sequelae at the earliest and an attempt made to correct them if possible. Larger number of social workers must be made available to get maximum follow-up, and more patients must be followed up with subsequent laparoscopy.

Many operations are now being done in the suboptimal camp settings in our efforts to bring down the population by

widespread implementation of family planning programme. It is, therefore, time to pause, ponder and think about this problem seriously, if the family planning programme is not to suffer a set-back.

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TABLE I

Unpleasant sequelae in 15 cases of tubal ligation

Age in years	No. of cases	Diagnosis	Wife (No.)	Children
21-25	1	Abortion	1	1
26-30	2	"	1	1
31-35	3	"	2	2
36-40	4	"	3	3
41-45	1	"	1	1
Total	11	11	11	11

These cases were seen during the period of 1965-1970 at the Dept. of Obstetrics & Gynaecology, K.E.M. Hospital, Bombay. In all of them, the diagnosis was confirmed by laparoscopy. The other half were Indian women.