

# THE PHYSICAL AND MENTAL STATE FOLLOWING STERILISATION

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Sterilisation in the female by ligation of the fallopian tubes has been widely practised for a long time. However, some doubt exists, particularly in the lay mind, about some disruption in the sexual, psychological and menstrual functions in the operated female. It is, therefore, very important to study the sequelae of such cases.

Out of over 250 personal cases who were operated upon more than 4 years ago, 200 cases whose addresses were correctly recorded were selected for detailed study.

A questionnaire was sent in regional language enquiring about number of children, age, and loss of child subsequent to operation, state of general health, menstrual function, sexual life and mental state.

The results of the survey are summarised below as per reply from 172 cases received so far:

## *Selection of Cases*

1. *Age Group*: Maximum number of cases were operated upon between the two age groups, 25-30 and 31-35. The youngest case operated upon was

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19 years old, a second para with a history of pulmonary tuberculosis, and the oldest patient was aged 42, a prolific 10th para.

2. *Parity*: Only two cases were operated upon who had less than 3 children and the majority had more than 4 children.

3. *Sex of Children*: No case was operated upon who had no son. Moreover, the son or sons alive at the time were judged to have a reasonable expectation of survival.

## *Nature of the subjects selected*

About 40% of the cases were urban and 60% were rural people.

About 50% of the cases were puerperal, the other 50% followed an abortion, or were done in connection with other gynaecological operations or solely as a non-puerperal operation.

## *Method of Operation*

Only two cases were vaginally ligated along with pelvic floor repair and the rest were all by the abdominal route. The incisions were either paramedian, transverse, or Pfannenstiel incisions. Cases operated upon in connection with caesarean sections are not included in this series.

The tubes in all cases were crushed at the base of a loop, ligated and then

the loop was excised. In addition, in about 60% of the cases the fimbriated ends were also excised as an additional precaution.

The ligature material used was chromic No. 2 catgut and only on a few cases silk ligature was used. If catgut may dissolve and result in failure, the silk may also cut through

health such as dysentery, enteric fever, pulmonary troubles, etc.

Three cases reported extra deposition of fat. This may be due to ovarian dysfunction leading to metabolic disturbances. Some cases after the operation are also in the habit of discarding all physical exertion and over-feeding for recouping health.

#### Menstrual Function

Quantity	Duration	Interval
Increased appreciably in 35 cases	Prolonged in 26 cases	Shortened in 28 cases
Diminished in 37 cases	Shortened in 52 cases	Prolonged in 30 cases
Unaffected in 98 cases	Unaffected in 94 cases	Unaffected in 114 cases

or slip out more easily. The crushing and discontinuity is all that is important and not so much what we ligate with. To me the ligature material is merely an agent for haemostasis and not meant for permanently holding the occluded tube, which silk never does.

#### The period of follow-up study

The minimum period was four years and the maximum was 13 years. The list shows the number of cases in each period.

TABLE I

4- 5 years	..	..	..	20 cases
6- 7 years	..	..	..	70 cases
8- 9 years	..	..	..	60 cases
10-13 years	..	..	..	22 cases

#### Condition of the cases followed up

##### State of general health

Reported better, 68 cases.

Reported worse, 64 cases.

Same, 40 cases.

Seventy-six cases reported that they had some other cause of ill

Irregular & dysfunctional menstrual bleeding was reported in 34 cases. In one case menopause occurred at the age of 42 years.

It will be apparent that some sort of menstrual derangement for which women in general worry most, affected about 40% of cases. Although some of the cases were already approaching menopause at the time of study it cannot be denied that some younger cases suffered from dysfunctional type of bleeding, oligomenorrhoea and also excessive loss following the operation. It may be explained perhaps by some alteration in the vascular supply to the ovary. It is practically impossible to preserve the terminal branch of the uterine artery going to the ovary. It is either cut or kinked during a ligation operation. Many patients' ovaries are more dependant on the uterine arterial supply rather than the ovarian artery. Such cases are liable to suffer from derangement of ovarian function, transient or permanent.

Menstrual pain was not very signi-

ficant in the majority of cases. However, some cases developed pain a few years after the operation. The author has noticed that some cases who had spasmodic dysmenorrhoea and had spontaneous relief following childbirth, started having spasmodic dysmenorrhoea again when they did not have a pregnancy for over 3-4 years due to natural causes. A few of the cases under study developed spasmodic dysmenorrhoea 2-3 years after sterilisation operation. It may be due to regeneration of autonomic nerve fibres around cervix, which were torn during childbirth resulting in cure of spasmodic dysmenorrhoea previously.

Loss of more than one son or daughter — nil.

One patient having 4 sons and one daughter suffered death of one son. She is always apprehensive of losing other children and is very depressed. Many women still consider deliberate suppression of childbirth a crime and consider loss of a child as a sort of penalty of their sin. Loss of child after operation, therefore, is a very strong cause for psychological derangement.

#### *Failure*

No case of failure is reported except one of temporary sterilisation not included in this series.

#### *Sexual Function*

<i>Capacity for sexual life</i>		<i>Libido or sexual urge</i>	
Satisfactory	— 134 cases	Diminished	— 36 cases
Tolerable	— 30 cases	Unaffected	— 115 cases
Unsatisfactory	— 8 cases	Absent	— 2 cases

The above figures do not show any appreciable adverse effect on sexual function. It must be realised that most of the cases were mothers of more than 4-5 children and the average present age of the series was round about 40 years and above. Therefore, the slight adverse report of the few husbands may be due to the natural decline due to approaching menopause. One husband wrote that his wife had lost her womanhood but she was aged 46 and a mother of 9 children.

#### *Loss of children subsequent to operation*

Loss of one son or daughter — 14 cases.

#### *Mental State*

Cheerful and normal — 110 cases.

Depressed — 55 cases.

Nervous and apprehensive — 7 cases.

#### *Craving for children*

Not noticed in 160 cases.

Noticeable in 12 cases.

Craving for child in the lap is peculiar to some women that cannot be judged by mere numbers alone. Some women are indifferent about having a child and may not be particularly keen for them. There are other women who are essentially mothers and their craving may be incredible. One such case, aged 35, came into my chamber and when ask-

ed about her ailments she simply said none whatever except that she was not having a baby for the last 7 years. I asked how many she had and she said 'ten'. These facts should be seriously assessed while selecting and advising cases for sterilisation.

#### *Temperament*

Irritability and anger present in 82 cases.

Normal in 90 cases.

#### *Attitude and opinion regarding the operation*

One hundred and thirty-eight cases advised others to get operated.

Sixteen cases discouraged others to undertake operation.

Eighteen cases did not give any opinion.

*Mortality of the series:* nil.

#### *Morbidity*

Febrile convalescence — 27 cases.

Wound infection — 8 cases.

Ventral hernia — 1 case.

#### *Discussion*

The above study will reveal that the operation has not got any appreciable deleterious effects and women in general are satisfied and advise others to have the operation performed. Nevertheless, even in such selected series, a small proportion suffered from menstrual derangement, psychological disturbances and diminished sexual function.

It has been observed, by some other surgeons, that psychological disturbances have been very marked where

operation had been performed on very young patients or those having less than 3 children. Some husbands coerce their wives to consent against their will and often give an inflated number of their children in order to persuade us to do the operation.

Although mortality and morbidity of the present series is not much it has been found that several deaths have occurred and complications such as intestinal obstruction, hydrosalpinx with torsion, retained swab, etc. were not very negligible, when operated in ill-equipped hospitals or nursing homes by untrained surgeons. The operation, however small it may be, is a laparotomy and should not be undertaken lightly. In properly selected cases it is a safe operation in the hands of an average, experienced surgeon, with very little physical or psychological repercussions.

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