

LATE EFFECTS OF STERILIZATION

by

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Sterilisation of women by tubal operations is common today in any obstetric and gynaecological service in this country. This procedure is now backed by the State authority to prevent population explosion; as a result every year increasing numbers of women are being sterilised for the last 15 years or so. During 1963-64, 42 sterilised women reported with symptoms to the clinic and they had this operation five to seventeen years earlier. All of them belonged to poor-middle class families and underwent this operation for socio-economic reasons—36 of them in the puerperium while the rest were done later. These women of varying age groups (from 23-50 years) were carefully studied from various aspects, viz., thorough history taking, condition of health, working capacity, psycho-sexual behaviour and complete clinical study. They com-

plained of one or more symptoms developing sooner or later after the operation, and 25 of them alleged their sufferings to the operation. Twelve of them also underwent laparotomy for pelvic lesions, when histology of removed tubes, ovaries and uterus (from biopsy or removed organs) could be studied. For comparison, another group of 40 women (in age groups 24-47 years) drawn from similar population and who had spontaneous secondary infertility after one or more childbirths 5-15 years back were simultaneously studied. The former patients comprise "sterilisation group" while the latter serve as the "control group".

Observations

Condition of health: This has been recorded as described by woman on her body weight as follows:

TABLE I
Showing body weight following Sterilisation operation

Body weight	Sterilisation group	Per cent	Control group	Per cent
Unchanged	11	26	26	65
Wasting	22	52.5	10	25
Obese	9	21.5	4	10

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Seventy-four per cent of the women in sterilisation group complained either that they had wasted or become obese following operation; there was more than double the incidence of wasting than obesity in this series. These data show a signi-

ficant increase of wasting as also obesity than those in the control group.

Working capacity: Sixty-nine per cent of the women in sterilisation group described their working capacity as housewives to be poor which was significantly higher than in those of the control group (22.5%).

Psychological behaviour and sex life: Emotional behaviours as assessed from history taken from these women as well as their husbands and close relations showed 'more emotional upsets than before' in 27 (64%) in sterilisation group and 12 (30%) in control group. Thus this was significantly higher in the former group. The younger the woman sterilised, the more often was she emotionally upset. Six women, who were sterilised before the age of 25 years, developed various symptoms of anxiety neurosis viz., poor sleep, palpitation, sudden blackout on standing, giddiness, wasting, fainting attacks and pelvic symptoms like those of pelvic sympathetic syndrome. These were all symptoms without any evident clinical signs. The writer ventures to describe this condition as "sterilisation syndrome".

There were four women who described sufferings of secondary disease to be the result of the operation. For example, these four women ascribed constant cough, chronic bronchitis, polyneuritis following dengue fever, and psychosis developed after operation to be the result of it; however, on careful study, these illnesses were found to be acquired later; but for psychosis, the woman was a bad selection for sterilisation operation.

Sterilised women complained of loss of libido in 11 (28.5%) and dyspareunia in 12 (29%); in the control group, these figures were 1 (2.5%) and 3 (7.5%) respectively. Thus there was significant rise in incidence of disturbed sex-life in the sterilisation group.

Gynaecological effects

There were 2 cases of abdominal scar endometriosis in sterilisation group, but in the control group there was one case of pelvic endometriosis. There was significant rise of incidence of hydrosalpinx with pelvic adhesions and cystic ovary in the sterilisation group. However, histology of ovary and uterus did not show any significant change, while ligated tubes in

TABLE II
Showing pelvic symptoms and lesions

Symptoms and lesions	Sterilisation group	Per cent to total	Control group	Per cent to total
Profuse periods	23	55	8	20
Acquired dysmenorrhoea	11	26.5	8	20
Pelvic pain	9	21.5	2	5
Hydrosalpinx and adhesions	12	28.5	2	5
Cystic ovary	8	19	1	2.5
Fibroids	2	4.7	4	10
Bulky uterus	3	7	5	7.5
Clear pelvis	15	35.7	25	62.5

non-hydrosalpinx cases showed evidences of scarring particularly around non-absorbable suture material.

Discussion

It is hard to blame the sterilisation operation as bringing about loss of weight although this was a belief of the lay public. There are many other factors that can operate to effect wasting other than the operation viz., chronic colitis, under-nutrition, as are rampant in these women. However, evidence in this series suggested that anxiety neurosis following operation appears to be a contributory factor.

The incidence of menstrual disorders was high in the sterilisation group. These were the result of post-sterilisation pelvic lesions and also dysfunctional uterine haemorrhage, the latter being the effect of hidden anxiety (Dawn, 1964). Incidence of profuse periods in this series was 55% which was much higher than general incidence (15-20%) of dysfunctional uterine haemorrhage (Devi and Sutara, 1964). Some (Coyaji, 1964) doubt that ovarian ischaemia following tubal ligation might be a factor for ovarian dysfunctional haemorrhage. This study shows that it is more pelvic adhesions and hydrosalpinx, at times even silent, that are responsible for profuse periods rather than any ovarian ischaemia.

It is to be realised that the material for study in this paper is not a complete follow-up of a group who had sterilization but rather a retrospective study of a series of wo-

men who had symptoms following operation, thus the significance of this paper should be taken in that light.

Summary and Conclusion

Some women who had sterilisation operation, by tubal ligation or partial excision mostly in the puerperium, reported with symptoms after 5 years and as late as 17 years.

2. These sterilised women significantly suffered more from loss of weight with poor working capacity than those of the control group who had spontaneous secondary infertility. Sterilisation is considered a factor but not fully responsible for this suffering. The younger the woman the more often did she suffer from various manifestations of anxiety neurosis which can be described as "sterilisation syndrome". These women, particularly those who were literate, ascribed their ill-health to the operation.

3. Sterilised women were significantly more emotionally upset and had disturbed sex life (dyspareunia and loss of libido) than those of the control group.

4. These women suffered from profuse periods (55%), acquired dysmenorrhoea (26.5%) and pelvic pain (21.5%). There was significant increase of hydrosalpinx with intrapelvic adhesions and cystic ovary. Menstrual disorders were ascribed to pelvic pathology rather than ovarian ischaemia as histology of ovary and uterus in 12 cases did not show any significant change. There were two cases of abdominal scar endometriosis in the sterilised series.

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