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# Sexual adjustment to tubal sterilization

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#### Summary

Sexual adjustment after laparoscopic sterilization has been investigated in a Danish population. The study comprises 659 patients who underwent laparoscopic sterilization during the 4-year period 1980–1983. The study focused on libido, coital frequency, coital enjoyment, lack of excitement, sexual life and feelings of femininity after sterilization in one group of patients satisfied with the sterilization and in another group dissatisfied with the decision to undergo tubal sterilization. There was no difference in libido, coital frequency and sexual satisfaction between the two groups. However, a significant difference was seen between the two groups concerning lack of excitement in sexual life, perception of a more relaxed sexual life, and, finally, perception of changed femininity.

Tube; Sterilization; Sexual adjustment

#### Introduction

The reported sexual adjustment after tubal sterilization differs from study to study. Most studies express an improved or unchanged sexual life [1-5]. In their prospective study, Cooper et al. [3] found, that 78% of the sterilized women expressed improved or unchanged coital frequency, and in Smith's study [5] 92% reported improved or unchanged satisfaction.

Børdahl [2] interviewed women at 3 and 12 months after sterilization, and found that 95% reported an improved or unchanged sexual life. In their retrospective study, Ansari and Francis [1] found that 78% of the sterilized women reported an improved or unchanged sexual life.

The present study was performed in order to analyse a Danish population of sterilized women, both in terms of general sexual aspects, and in order to compare

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women that were satisfied with the decision of sterilization to those that were dissatisfied with the decision.

## Materials and methods

In the 4-year period 1980–1983, a total of 755 women underwent laparoscopic tubal sterilization at Herlev Hospital, Denmark. The laparoscopy was performed with the two-puncture technique followed by bipolar electrocoagulation of the tubes. Since 1973 any Danish women over 25 years of age is eligible for sterilization. Eighteen patients were excluded from the study (two had died, twelve patients had emigrated and four patients had undergone repeat sterilization). The remaining 737 women were sent a questionnaire 4-8 years after the sterilization. Altogether 668 women returned the questionnaire, giving a response rate of 90.6%. After the questionnaires were received, another nine patients were excluded (five were sterilized because of severe mental disorders and four underwent hysterectomy shortly after the sterilization). The final study thus comprises 659 patients.

The questionnaire focused on regret of sterilization, change in libido, coital frequency and coital enjoyment. Furthermore, the women were asked about lack of excitement in sexual life and feelings of femininity after the sterilization. These factors were compared for 612 women who were satisfied with the sterilization (group I) and 47 women who were dissatisfied with the decision of undergoing a tubal sterilization (group II).

Statistical analysis were made by Chi-square test.

#### Results

Of the 659 sterilized women included in this study, 612 were contended with the decision to have a tubal sterilization. The other 47 women regretted the sterilization for various reasons.

There was no difference in libido and coital frequency between groups I and II. The overall impression is that there was a good sexual adjustment to the sterilization with 625 women (94.8%) having an improved (140 women) or unchanged (485 women) libido (Table I), and 624 (94.7%) having an increased (114 women) or unchanged (510 women) coital frequency (Table II).

#### TABLE I

	Unchanged libido	Improved libido	Impaired libido
Group I	453 women	128 women	31 women
(n = 612  women)	(74.2%)	(20.9%)	(5.1%)
Group II	32 women	12 women	3 women
(n = 47  women)	(68.1%)	(25.5%)	(6.4%)
Total	485 women	140 women	34 women
	(73.6%)	(21.2%)	(5.2%)

Perception of libido after female sterilization

#### TABLE II

	Unchanged coital frequency	Increased coital frequency	Decreased coital frequency
Group I	476 women	104 women	33 women
(n = 612  women)	(77.8%)	(17.0%)	(5.4%)
Group II	34 women	10 women	2 women
(n = 47  women)	(72.3%)	(21.3%)	(4.3%)
Total	510 women	114 women	35 women
	(77.4%)	(17.3%)	(5.3%)

Coital frequency after female sterilization

There was no statistically significant difference in the sexual satisfaction between groups I and II, with 266 women (43.5%) and 15 women (31.9%), respectively, expressing improved sexual satisfaction (281 women or 42.6% for the entire study).

On the other hand, a total of 448 sterilized women (68%) expressed a more relaxed sexual life without any fear of pregnancy or contraceptive side effects. A comparison between the two groups revealed that 428 women (69.9%) and 20 women (42.6%), respectively, expressed a more relaxed sexual life (p < 0.01).

Some sterilized women complain of reduced sexual excitement, because the chance/risk of pregnancy is eliminated. In this study only 20 women (3%) expressed lack of sexual excitement. However, seven of these women belonged to group II (14.9%) and 13 women belonged to group I (2.1%). This difference is significant (p < 0.01).

Finally, the women were asked about changed femininity caused by the sterilization. Altogether 21 women expressed a perception of a change in femininity after the sterilization (3.2%). However, eleven of these women belonged to group II (23.4%) and only ten belonged to group I (1.6%). This difference is also significant (p < 0.01).

#### Discussion

Different factors have to be considered in investigations of this character. Regret of sterilization for various reasons has to be considered. The majority of studies find an overall improved or unchanged sexual life after tubal sterilization [1-8]. Some of these studies were done many years ago [6,7] and may be of dubious significance today due to considerable changes in indications for female sterilization and in counselling methods. However, more contemporary studies also express good sexual adjustment to female sterilization [1-5,8].

In this study coital frequency and perception of libido were improved or unchanged in 95%.

Moreover, a large proportion of the sterilized women expressed improved sexual satisfaction. Concerning libido, coital frequency and sexual satisfaction, no demonstrable statistically significant existed between group I and II

However, in terms of a more relaxed sexual life, reduced sexual excitement and changed perception of femininity, a statistically significant difference was revealed. The majority of women who expressed lack of excitement in sexual life or feelings of changed femininity were those who regretted their decision to have tubal sterilization. This makes the problem very complex, as the patients annoyance due to the dissatisfaction with the tubal sterilization may be considered isolated sexual maladjustment.

Therefore, it is very important in investigations concerning sexual and marital adjustment or the rate of psychiatric morbidity, to disclose the proportion of women regretting the sterilization because they perceived later gynecologic problems related to the procedure or because they wanted more children at a later stage.

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