

SEXUAL FUNCTIONING AFTER HYSTERECTOMY

By

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SUMMARY

Fifty cases (aged 34 to 58 years; mean age 42.4 years) undergoing hysterectomy were studied preoperatively and post operatively (at 3 and 6 months). Majority of cases were married (84.0%), belonged to lower social class (66.0%) and had either no education or less than middle class (70.0%). Mean parity was 2.6 (range 1 to 6). Fourteen women (28.0%) complained of deterioration in sexual functioning while 21 women (42.0%) felt improvement and 15 women (30.0%) felt no change. Among the preoperative anxieties, the commonest one was of sexual alteration (60.0%), followed by that of operation and/or anesthesia (44.0%), weight gain (36.0%), loss of femininity (28.0%) etc. There was statistically significant ($p < 0.05$) association between the presence of preoperative sexual anxiety and the subsequent loss of desire for sex. Dyspareunia was also more in patients with preoperative sexual anxiety ($p < 0.05$) after 3 months of operation and showed statistically significant improvement ($p < 0.05$) after 6 months. Women, having a frequency of sexual intercourse of less than once per week had a worse overall sexual outcome than those whose frequency of intercourse was once per week or more. The frequency of intercourse was, however, found to be unrelated to parameters of sexual performance (like desire, sexual enjoyment, orgasmic ability and dyspareunia).

Introduction

Hysterectomy is being increasingly performed for various gynaecological and obstetrical reasons (Richards, 1973). Although with the advent of modern anaesthetic and surgical techniques, the

physical morbidity and mortality has reduced, many recent studies (Richards, 1974; Gath *et al*, 1982) have shown that there is still considerable psychologic and sexual morbidity associated with this operation. In studies where patients were asked specifically about change in their sexual relations after hysterectomy, the incidence of sexual dysfunctioning varied from 10% (Huffman, 1950), 15% (Dodds *et al*, 1961), 17% (Gath *et al*, 1982) to 37% (Dennerstein *et al*, 1977).

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Accepted for publication on 31-3-89.

This wide range of results was due to many variables like inclusion of cancer patients (Drellich and Bieber, 1958), the time interval since surgery (Utian, 1975) and the differences in preoperative psychological preparation of the patient for surgery (Dennerstein *et al*, 1977). These studies had the drawbacks that they were either based on postal surveys (Craig and Jackson, 1975, Jackson, 1979), or in the questionnaires used, only one item was included about sexual behaviour which did not define and ask the type of sexual alternation noticed by the patient or whether the alteration was psychologic or physiologic Ackner, 1960; Munday and Cox, 1967; Craig and Jackson, 1975; Jackson, 1979), or did not include preoperative data (Chynoweth, 1973; or they were retrospective studies Dennerstein *et al*, 1977); Hampton and Tarnasky, 1974). The present prospective study was designed to study the sexual response of patients before and after undergoing hysterectomy.

Material and Methods

The study was conducted by the department of psychiatry in the Obstetrics and Gynaecology department of Lady Hardinge Medical College and associated Smt. Sucheta Kriplani Hospital, New Delhi, from January 1986 to December 1987. The patients with known medical or psychiatric illness, malignancy or no sexual partner or extended surgery (hysterectomy with oophorectomy or mastectomy) were excluded from the study. The sociodemographic data (like age, literacy, marital status, parity, social class, previous gynaecologic, medical and psychological history etc.) were recorded on a proforma and then, a detailed sexual assessment (about chan-

ges in desire for sex, sexual enjoyment, ability to reach climax, dyspareunia, any preoperative anxiety about sexual alteration, loss of femininity, mental or sexual alteration, weight gain, premature aging etc.) was made. Difficulties in the partner's sexual performance were specifically asked about. The patients were interviewed thrice—before operation, and three and six months after operation. Kuppuswamy's scale—urban (1976) was used for the classification of social class.

Results

Fifty seven patients (aged 30 to 60 years; mean age-42.4 years) undergoing hysterectomy were interviewed preoperatively. The final analysis was done in 50 cases (aged 34 years to 58 years; mean age 42.4 years). All the 50 cases (42 married, 4 widowed, 3 separated, 1 unmarried) taken up for analysis were having regular sex before and after undergoing hysterectomy but the subgroups (married versus widowed, separated and unmarried) were too small for detailed statistical analysis and comparison. The mean parity was 2.6 (range 1 to 6). 33 women (66.0%) belonged to lower socio-economic status (Class III, IV & V) and 17 (34.0%) to upper social class (Class I & II). Out of 50 cases, 5 (10.0%) were graduates, 10 (20.0%) had education above high school, 15 (30.0%) upto middle class or below while 20 women (40.0%) were illiterate. 43 cases (66.0%) were housewives and 7 (14.0%) were employed. Out of these, 7 patients (12.2%) did not come up for follow up after three months and the follow up after six months could be completed in only 40 cases (drop out 17.6%).

Anxiety about being altered sexually by the operation was the commonest

TABLE III

The Relation Between Sexual Anxieties and Post Operative Response After 6 Months (N = 40)

| Type of sexual alteration | Sexual anxieties | | Total | p value |
|----------------------------------|------------------|-----------|-----------|----------|
| | None | Present | | |
| A. Overall sexual outcome | | | | |
| (i) Improved | 7 | 9 | 16 | p < 0.05 |
| (ii) No change | 7 | 6 | 13 | |
| (iii) Deteriorated | 1 | 10 | 11 | |
| Total | 15 | 25 | 40 | |
| B. Sexual Desire | | | | |
| (i) Improved | 2 | 4 | 6 | p < 0.01 |
| (ii) No change | 10 | 6 | 16 | |
| (iii) Deteriorated | 3 | 15 | 18 | |
| Total | 15 | 25 | 40 | |
| C. Sexual Enjoyment | | | | |
| (i) Improved | 2 | 6 | 8 | p > 0.05 |
| (ii) No change | 9 | 13 | 22 | |
| (iii) Deteriorated | 4 | 6 | 10 | |
| Total | 15 | 25 | 40 | |
| D. Ability of Climax | | | | |
| (i) Improved | 13 | 3 | 16 | p > 0.05 |
| (ii) No change | 8 | 16 | 24 | |
| (iii) Deteriorated | 4 | 6 | 10 | |
| Total | 15 | 25 | 40 | |
| E. Dyspareunia | | | | |
| (i) Improved | 2 | 16 | 18 | p > 0.05 |
| (ii) No change | 9 | 7 | 16 | |
| (iii) Deteriorated | 4 | 2 | 6 | |
| Total | 15 | 25 | 40 | |

were found to be deteriorated in 14 women (28.0%) while 21 women (42.0%) stated their sexual relationship has improved since the operation. 15 women (30.0%) detected no change. Table III shows the relation between sexual anxieties and post operative response after 6 months (N=40). Among sexual responses, only dyspareunia showed statistically significant ($p < 0.01$) improvement after 6 months as compared to that after 3 months. Women, having a frequency of sexual intercourse of less than

once per week, had a worse overall sexual outcome than those whose frequency of sexual intercourse was once per week or more (Table IV). The frequency of sexual intercourse was, however found to be unrelated to parameters of sexual performance investigated (like sexual enjoyment, desire, orgasmic ability, dyspareunia). No statistical significant relation was found between overall sexual alteration and variables (like parity, type of presenting complaints e.g. menorrhagia, pelvic pain etc. necessitat-

type of preoperative anxiety the women had and was present in 30 cases (60.0%). Other anxieties which troubled the women interviewed are shown in Table I. The preoperative anxieties other than sexual were not found to be associated with any subsequent sexual deterioration. The presence of sexual performance after the operation was associated with an overall deterioration of sexual relations after the operation. There was a statistically significant relationship between the presence of this type of preoperative anxiety and subsequent loss of desire for sexual intercourse and increased dyspareunia (Table II and III). At 3 months

follow up (Table II), sexual functions

TABLE I
Pre-operative Anxiety

| Type of anxiety | No. of patients(%) (N=50) |
|--|------------------------------|
| Sexual alteration | 30 (60.0) |
| General of operation and/or anesthetic | 22 (44.0) |
| Weight gain | 18 (36.0) |
| Loss of femininity | 14 (28.0) |
| Loss of husband's affection | 11 (22.0) |
| Premature aging | 8 (16.0) |
| Excessive hair growth | 6 (12.0) |
| Cancer | 3 (6.0) |
| Haemorrhage | 3 (6.0) |
| Mental deterioration | 2 (4.0) |

TABLE II

The Relation Between Sexual Anxieties and Postoperative Response after 3 Months (N = 50)

| Type of sexual alteration | Sexual anxieties | | Total | p value |
|----------------------------------|------------------|---------|-------|---------|
| | None | Present | | |
| A. Overall sexual outcome | | | | |
| (i) Improved | 11 | 10 | 21 | p <0.05 |
| (ii) No change | 7 | 8 | 15 | |
| (iii) Deteriorated | 2 | 12 | 14 | |
| Total | 20 | 30 | 50 | |
| B. Sexual Desire | | | | |
| (i) Improved | 5 | 4 | 9 | p <0.05 |
| (ii) No change | 12 | 8 | 20 | |
| (iii) Deteriorated | 3 | 18 | 21 | |
| Total | 20 | 30 | 50 | |
| C. Ability to Climax | | | | |
| (i) Improved | 6 | 4 | 10 | p >0.05 |
| (ii) No change | 9 | 19 | 28 | |
| (iii) Deteriorated | 5 | 7 | 12 | |
| Total | 20 | 30 | 50 | |
| D. Sexual Enjoyment | | | | |
| (i) Improved | 3 | 8 | 11 | p >0.05 |
| (ii) No change | 12 | 14 | 26 | |
| (iii) Deteriorated | 5 | 8 | 13 | |
| Total | 20 | 30 | 50 | |
| E. Dyspareunia | | | | |
| (i) Less pain | 3 | 9 | 12 | p <0.05 |
| (ii) No change | 14 | 10 | 24 | |
| (iii) More pain | 3 | 11 | 14 | |
| Total | 20 | 30 | 50 | |

TABLE IV
Coital Frequency and Post Operative Sexual Response

| Overall sexual outcome | Coital frequency | | Total | p value |
|------------------------|------------------|----------------|-------|----------|
| | Less than weekly | Weekly or more | | |
| Improvement | 5 | 16 | 21 | p < 0.05 |
| No change | 9 | 6 | 15 | |
| Deterioration | 6 | 8 | 14 | |
| Total | 20 | 30 | 50 | |

ing hysterectomy, feelings towards partner, age, literacy and occupation of patient, duration of marriage etc.).

Discussion

The sexual morbidity incidence (28%) in the present study found was comparable to that reported in various other studies viz. 28% by Munday and Cox (1967), 37% by Dennerstein *et al* (1977) and 38% by Richards (1973). A negative sexual expectation of the operation was significantly associated with a poor overall sexual outcome and loss of desire for sex postoperatively. This finding further substantiates previous studies (Dennerstein *et al*, 1977; Lindgren, 1973) indicating effectiveness of self-fulfilling prophecies. There are many explanations for these negative sexual expectations of hysterectomy. Some women felt that their femininity had been altered by the operation. Some women had been influenced in the development of negative sexual expectation by friends and relatives who made negative comments concerning the operation and its results (like weight gain, excessive hair growth, etc.). Lack of knowledge of sexual anatomy and physiology also resulted in anxieties about sexual outcome in some women. Some women perceived that they

had been altered sexually because of the different way they were treated by their partner. Ten women (20.0%) reported that their husbands were more understanding after the operation. Only 12 women were able to discuss their sexual anxieties with their doctors. The discussion appears to have made no difference to sexual outcome. This may mean that the patients with sexual anxieties needed a greater amount of counselling or supportive psychotherapy than had been made available to them (Dennerstein *et al*, 1977). Dyspareunia which showed deterioration in 22% of cases after 3 months, was significantly improved with the passage of time and was reported only by 4% cases.

Though loss of interest in sex is a common accompaniment of depressive illness (Gath *et al*, 1982), the sexual morbidity in the present study appeared to be a specific phenomenon. It was found to be unrelated to patients reported feelings of physical and mental well-being. Only 3 (6%) of the patients interviewed were found to be clinically depressed at the time of the interview. Sexual deterioration could not be attributed to anger or disappointment about the clinical results of the procedure, as the operation was highly successful in

relieving the presenting symptoms of the patient (symptoms were relieved completely in 82%; 14% had mild residual symptoms and in only 4% did moderate to severe symptoms persist).

Thus it can be concluded from the study that psychological factors, particularly an expectation that the operation will adversely affect sexual relations, are responsible for the deterioration in sexual relations which follows this operation. Further prospective studies are needed to confirm these findings.

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