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GYNAECOLOGY

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## Sexuality after Hysterectomy

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### ABSTRACT

**Objective** To explore the frequency of sexual desire, masturbation, orgasm, coitus, dyspareunia and the quality of sexuality prior to disease symptoms and 6 months after hysterectomy.

**Design** Prospective study.

**Setting** Department of Obstetrics and Gynaecology, Ramathibodi Hospital. (from August 1994 to January 1995)

**Subjects and methods** Thirty-eight patients who had undergone total abdominal hysterectomy without bilateral salpingo-oophorectomy were interviewed including both open-ended and structured questions on the fifth postoperative day and six months after hysterectomy. Chi-Square with Yates' correction and Fisher exact test were used for statistical analysis.

**Results** Thirty-three women in reproductive age who had undergone total abdominal hysterectomy due to non-malignant conditions of the uterus were included. Six months after hysterectomy, the frequency of sexual desire, masturbation and orgasm were observed to be unchanged, however, the frequency of coitus increased and dyspareunia reduced significantly. Considering the overall quality of sexuality, 67% were observed to be unchanged, 21% felt better and 12% felt worse.

**Conclusion** After total abdominal hysterectomy without bilateral salpingo-oophorectomy, the majority of patient's sexual behaviours were observed to be unchanged. Strikingly, the frequency of dyspareunia were reduced and the frequency of coitus increased significantly.

**Key words :** sexuality, hysterectomy

Gynaecologic diseases are mainly related to the reproductive organs of the women. However, women's reproductive organs are internal that inspection by themselves are not possible which lead them to have more mistakes concerning their potential of reproductive function in terms of sexuality. Nowadays, hysterectomy have been increasingly performed to treat gynaecologic diseases so that physical as well as psychological side effects have become an increasingly pertinent issues.<sup>(1)</sup>

Freud regarded the uterus as a significant symbol of femininity, women who had previously undergone hysterectomy will have severe emotional illness in terms of castration anxieties. This effect on sexuality may be real or fantasy but fantasy can stimulate emotional responses which can leave women with feelings of sexual inadequacy.<sup>(2)</sup> With these attitude changes, the sexual behaviour of women after hysterectomy should be markedly changed but still not confirmed.

The objective of this study was to explore a group of women before and after hysterectomy to determine the effects of hysterectomy on subsequent sexuality i.e. the frequency of sexual desire, masturbation, orgasm, coitus, dyspareunia and the overall quality of sexuality prior to disease symptoms and 6 months after hysterectomy.

## Materials and Methods

This prospective study was carried out at the Department of Obstetrics and Gynaecology, Ramathibodi Hospital from August 1994 to January 1995. There were 38 patients who had undergone total abdominal hysterectomy without bilateral salpingo-oophorectomy. All of them met the following criteria for inclusion in this study ; firstly, all women were scheduled for hysterectomy for benign conditions of the uterus. Secondly,

currently living with husband at least one year before symptom. Thirdly, there was no psychiatric history or chronic physical disability and still menstruating. Fourthly, voluntary agreement to participate in this study.

Thirty-eight women who met the inclusion criteria were recruited in the study and all attended the first interview on the fifth post-operative day. A detail interview included both open-ended and structured questions. Six months after hysterectomy, each patient completed the self-report data and return it by mail to the researcher. Five patients (13.2%) did not return them, so the total study group comprised 33 women (86.8%).

The interview questions consisted of base-line characteristics i.e. her age, husband's age, duration of marriage, her education, husband's education, distribution of symptoms and also diseases. The sexuality included sexual desire, masturbation, orgasm, coitus, dyspareunia and the overall quality of sexuality before and after hysterectomy.

For statistical analysis, Chi-Square with Yates' correction and Fisher exact test were used to compare sexual desire, masturbation, orgasm, coitus and dyspareunia before and after hysterectomy. Significance was determined at  $P < 0.05$ .

## Results

The age of thirty-three women studied ranged from 21 to 46 years at the time of interview with a mean age of 40.8 years. The husband's age ranged from 25 to 56 years with a mean age of 43.2 years. The duration of marriage ranged from 8 to 26 years with a mean duration of 15.2 years. Distribution of the level of education showed 42.4% below high school, 27.3% high school and 30.3% at university level.

**Table 1.** Frequency of sexual desire before and after hysterectomy

Frequency of sexual desire (times/month)	Before hysterectomy (No.)	After hysterectomy (No.)
4 - 6	10	17
1 - 3	23	16
Total	33	33

P-value = 0.13

**Table 2.** Frequency of masturbation before and after hysterectomy

Frequency of masturbation (times/month)	Before hysterectomy (No.)	After hysterectomy (No.)
4 - 6	2	9
1 - 3	4	2
0	27	22
Total	33	33

P-value = 0.06

**Table 3.** Frequency of coital orgasm before and after hysterectomy

Frequency of coital orgasm in 100 times of coitus (times/month)	Before hysterectomy (No.)	After hysterectomy (No.)
> 50	21	23
< 50	12	10
Total	33	33

P-value = 0.79



**Table 4.** Frequency of coitus before and after hysterectomy

Frequency of coitus (times/month)	Before hysterectomy (No.)	After hysterectomy (No.)
4 - 6	10	19
1 - 3	23	14
Total	33	33

P-value = 0.04

**Table 5.** Frequency of dyspareunia before and after hysterectomy

Dyspareunia	Before hysterectomy (No.)	After hysterectomy (No.)
Yes	14	5
No	19	28
Total	33	33

P-value = 0.03

Husband's level of education showed 30.3% below high school, 36.3% high school and 33.4% at university level.

Distribution of symptoms in the hysterectomy patients were palpable mass (36.4%), hypermenorrhea (33.3%), lower abdominal pain (15.1%), symptomless (9.1%) and menorrhagia (6.1%). Distribution of diseases showed myoma uteri (51.5%), adenomyosis (33.3%) and endometrial hyperplasia (15.2%).

Of 33 hysterectomy patients, comparing before and six months after hysterectomy, the frequency of sexual desire, masturbation and orgasm were observed to be unchanged (Table 1-3). However, the frequency of coitus increased

and dyspareunia reduced significantly (Table 4-5). For the overall quality of sexuality, 67% were observed to be unchanged, 21% felt better and 12% felt worse.

## Discussion

It is important to understand that gynaecologic diseases are related to genital organs and sometimes hysterectomy is performed to treat the diseases. Some studies reported that hysterectomy may affect woman's sexuality in particular sexual functioning and the overall quality of sexuality. To know about the effects of hysterectomy, we studied the sexuality before disease symptoms for comparison and excluded

the cases of hysterectomy with bilateral salpingo-oophorectomy because many studies reported changes in body image after operation in spite of hormonal replacement therapy<sup>(3)</sup> and also related with decreased libido.<sup>(4-7)</sup> However, the response to the operation depends on the emotional maturity of the women involved and cultural attitudes about the importance of genital organs relative to her own concept of being a woman.

This study used 6 months after hysterectomy for comparing sexuality because 80% of sexuality became the same as before operation in 4 months<sup>(8)</sup> and after follow up for 18 months the sexuality were the same as 6 months.

Considering sexual desire, the frequency of more than 3 times per month increased from 30% to 51.5% after hysterectomy but not statistically significant differences the same as reported by Virtanen<sup>(9)</sup> and Helstrom<sup>(10)</sup> that proposed sexual desire associated with psychosexual function especially anxiety from the effect of hysterectomy. In this study, only 18% of patients reported anxiety of sexuality when known to have an operation. Some studies reported decreased sexual desire, however, they studied in hysterectomy patients who also underwent bilateral salpingo-oophorectomy.<sup>(4,11)</sup>

Only 18.7% of patients in this study ever had practiced masturbation compared to 47.3% reported by Pongthai<sup>(12)</sup> and 47% reported by Helstrom.<sup>(10)</sup> The reason for very low practiced masturbation may be due to cultural and social values but unlike Pongthai report in which the study was conducted in a younger student population. There were no differences in the frequency of orgasm the same as reported by Bellerose,<sup>(4)</sup> Virtanen<sup>(9)</sup> and Helstrom,<sup>(10)</sup> but Dennerstein<sup>(3)</sup> and Kilkku<sup>(6)</sup> reported statistically significant decreased at 12 months after hysterectomy. Female orgasm is a complex mechanism,

however, Mundy<sup>(7)</sup> explained, effects on orgasm in terms of pelvic nerve injury after operation, that simple hysterectomy not like Wertheim's operation injured minimally to pelvic nerve plexus. It should not effect much on female orgasm.

The frequency of coitus more than 3 times per month increased from 30% to 57.5% after hysterectomy which was statistically significant differences the same as reported by Gath.<sup>(8)</sup> However, coital activity needs husband participation, the frequency of coitus may be varied. Temple University Medical Centre<sup>(2)</sup> reported 18% of men whose wives had hysterectomy performed developed situational impotence with their wives but not with others.

After hysterectomy, dyspareunia reduced significantly the same as reported by Kilkku,<sup>(5)</sup> Virtanen<sup>(9)</sup> and Helstrom.<sup>(10)</sup> Nearly 70% of the patients in this study reported the overall quality of sexuality to be unchanged the same as reported by Helstrom.<sup>(10)</sup> The reason may be due to many women in this study (60.6%) reported no adverse influence of the diseases on sexuality before hysterectomy. Dennerstein<sup>(3)</sup> reported that in the group of the overall quality of sexuality to be worse were associated with anxiety about sex after hysterectomy. In this study, 21% of patients the overall quality of sexuality to be better may be this group do feel desire for sex and able to be sexually aroused despite the disease symptoms likely to remain sexually active after hysterectomy.

The results of this study showed that sexuality after hysterectomy did not change much because all of the patients had at least one ovary intact, less anxiety about sex after hysterectomy and also small numbers of the study group may have diminished the power to detect real differences. In improving female sexuality after hysterectomy, physician should provide more

comprehensive care for their patients not only diseases but also emotional problem to prevent such sequelae preoperatively.

## References

1. Thompson JD. Hysterectomy. In : Thompson JD, Rock JA, editors. Te Linde's operative gynecology. 7th ed. Philadelphia : J.B. Lippincott, 1992 : 663-705.
2. Daly MJ. Psychological impact of surgical procedures on women. In : Sadock BJ, Kaplan HI, Freedman AF, editors. The sexual experience. Baltimore : Williams & Wilkins Company, 1976 : 308-13.
3. Dennerstein L, Wood C, Graham D. Sexual response following hysterectomy and oophorectomy. *Obstet Gynecol* 1977 ; 49 : 92-6.
4. Bellerose SB, Binik YM. Body image and sexuality in oophorectomized women. *Arch Sex Behav* 1993 ; 22 : 435-59.
5. Kilkku P. Supravagina uterine amputation vs hysterectomy : effects on coital frequency and dyspareunia. *Acta Obstet Gynecol Scand* 1983 ; 62 : 141-5.
6. Kilkku P. Supravagina uterine amputation vs hysterectomy : effects on libido and orgasm. *Acta Obstet Gynecol Scand* 1983 ; 62 : 146-52.
7. Mundy AR. An anatomical explanation for bladder dysfunction following rectal and uterine surgery. *Br J Urol* 1982 ; 54 : 501-4.
8. Gath D, Copper P, Day A. Hysterectomy and psychiatric disorder : a level of psychiatric morbidity before and after hysterectomy. *Br J Psychiatr* 1982 ; 140 : 335-50.
9. Virtanen H, Makinen J, Tenho T, Kilholma P, Pithanen Y, Hirronen T. Effects of abdominal hysterectomy on urinary and sexual symptoms. *Br J Urol* 1993 ; 72 : 868-72.
10. Helstrom L, Lundberg PO, Sorbom D, Backstrom. Sexuality after hysterectomy. *Obstet Gynecol* 1993 ; 81 : 357-62.
11. Williamson ML. Sexual adjustment after hysterectomy. *J Obstet Gynaecol Neonatal Nurs* 1992 ; 21 : 42-7.
12. Pongthai S. Sexual experience and sexual orientation among Ramathibodi medical students, Thailand. *J Med Assoc Thai* 1990 ; 73 (suppl 1) : 81-6.