

Sexuality after Total Abdominal Hysterectomy in Srinagarind Hospital

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Objective: To determine the effects on sexuality after Total Abdominal Hysterectomy (TAH) in north-eastern Thai women.

Design: Prospective descriptive study.

Setting: Srinagarind Hospital, Faculty of Medicine, Khon Kaen University from December 2004 to May 2006.

Material and Method: 80 married women, equal or less than 45 years old, which indicated for TAH with or without unilateral salpingo-oophorectomy. All patients had to attend the first questionnaire before surgery. The second and third questionnaires would be collected by mail in 3 and 6 months after surgery.

Main outcome measures: Frequency of dyspareunia, sexual desire, coitus, masturbation, and the quality of sexuality after TAH.

Results: The frequency of dyspareunia was decreased from 91.25% before TAH to 5% in 6 months after TAH (95%CI 1.19-1.61, $p < 0.05$). The frequency of sexual desire was increased from 55% before TAH to 88.75% in 6 months (95%CI 0.22-0.61, $p < 0.05$). The frequency of coitus was increased from 38.75% before TAH to 96.25% in 6 months after TAH (95%CI 0.54-0.98, $p < 0.05$). Normal sexual relations were increased from 53.8% before TAH to 85% in 6 months after TAH (95%CI 0.20-0.47, $p < 0.05$).

Conclusion: Sexuality was significantly improved overall after TAH and these might be the strong positive effects of TAH on sexual function.

Keywords: Sexuality, Total abdominal hysterectomy

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Total Abdominal Hysterectomy (TAH) is the major gynecological procedure. The common indications for nonmalignant diseases are Leiomyoma, Endometriosis, Dysfunctional Uterine Bleeding and Chronic pelvic pain⁽¹⁻³⁾.

In general, TAH is able to damage either many adjacent tissues or impaired autonomic nervous plexus⁽³⁻⁵⁾. The uterus and cervix have an important role in sexual arousal and sexual orgasm, probably due to stimulation of the Frankenhauser uterovaginal plexus^(1,4-7). Therefore, some women may have changed in their sexual function after TAH such as loss or decrease of libido and sexual desire^(4,6,8-11).

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Nowadays, according to the human right, the patients have to know clearly about the benefits and problems after TAH before making the decision to accept the operation. However, there is inadequate information about sexual function after the operation as sexual problems cannot be easily communicated and identified in northeastern Thai women due to the difference in cultures and the way of life.

This study is designed to explore the effects on sexuality after TAH in north-eastern Thai women at Srinagarind Hospital, Khon Kaen, Thailand.

Material and Method

This prospective descriptive study was carried out at Srinagarind Hospital between December 2004 and May 2006. The inclusion criteria of this study were equal or less than 45 years old, scheduled for TAH due

to nonmalignant disease. Patients with no sexual partner, having severe or long term postoperative complications such as fistula, bowel and bladder injury, were excluded from this study.

Eighty women were recruited in this study and all of them attended the first questionnaire before surgery. The second and third questionnaires would be sent to the patients in 3 and 6 months after surgery for re-evaluation. If the questionnaires were not return to the researcher after one month, the questionnaires would be collected by phone.

If there were no response or incomplete data was received, these data would not be analyzed. Information of the questionnaire consists of the baseline characteristics data and the details of the sexuality about sexual desire, masturbation, coitus, dyspareunia, and the quality of sexuality (sexual relations) (Table 1). The entire survey instrument including the questions in the questionnaire was extensively pretested and the outcomes should be based on a validated measure of the sexuality questionnaire that was self administered both before and after the operation to the same patients.

The baseline characteristics and sexuality data would be present in percent for nominal data and mean \pm standard deviation (SD) for continuous data and the paired sample t-test, the Friedman test were used for statistical analysis.

This study was approved by the Faculty Ethical Committee and received the Faculty research grants from the Faculty of Medicine, Khon Kaen University.

Results

Eighty married women were recruited in this study. Nobody drop out during data collection, the ages ranged from 30 to 45 years old, and the mean age was 41.55 years old (\pm 3.99 SD). Their incomes ranged from 5000 to 33000 Baht. The 15 women (18.8%) had underlying disease, four diabetes mellitus, two hyperthyroidism, three asthma, four hypertension, one migraine, and one epilepsy.

Thirteen women (16.3%) had no offspring and the others had one to four offspring.

Myoma uteri were the most common diagnosis, found in sixty women (75%). The others diagnosis and the indication for surgery were presented in Table 2 and 3.

Seventy-four women (92.5%) had undergone TAH with or without appendectomy and six women (7.5%) had undergone TAH with unilateral salpingo-oophorectomy with or without appendectomy.

No immediately postoperative complications in 75 women (93.8%) and five women (6.3%) developed immediately postoperative complications: one subfascial hematoma, three urinary tract infection and one acute urinary retention.

After TAH, the frequency of dyspareunia was decreased from 73 women (91.25%) to 22 women (27.5%) (95% CI 0.98-1.37, $p < 0.05$) and four women (5%) (95% CI 1.19-1.61, $p < 0.05$) in 3 and 6 months after surgery (Table 4).

Six months after surgery, the frequency of sexual desire was significantly increased. The percentage of women desiring sexual relations (once a week or

Table 1. The details of the sexuality questions in the questionnaires

In the last month, how many times have you had sexual relations?	In the last month, how frequently have you desired sex?
1. every day or almost	1. every day or almost
2. 2-3 days per week	2. 2-3 days per week
3. 1 day per week	3. 1 day per week
4. 1-2 days per month	4. 1-2 days per month
5. less than 1 day per month	5. less than 1 day per month
6. not at all or not sexually active	6. not at all or not sexually active
In the last month, how frequently have you experienced pain during sexual relations?	In the last month, how frequently have you experienced masturbation?
1. none of the time	1. every day or almost
2. little of the time	2. 2-3 days per week
3. some of the time	3. 1 day per week
4. most of the time	4. 1-2 days per month
5. all of the time	5. less than 1 day per month
	6. not at all or not sexually active

more) was increased from 44 women (55%) to 45 women (56.25%) (95%CI -0.25–0.20, $p = 0.825$) and 71 women (88.75%) (95%CI 0.22–0.61, $p < 0.05$) in 3 and 6 months after surgery (Table 5). Only 4 women (5%) in this study ever had practiced masturbation (once a month or more) before surgery and almost stopped after surgery (Table 6).

Table 2. The diagnosis of 80 women who had undergone TAH

The diagnosis	Number (percent)
Myoma uteri	60 (75%)
Adenomyosis	13 (6.3%)
Endometriosis	1 (1.3%)
Endometrial hyperplasia	2 (2.5%)
Ovarian cyst	1 (1.3%)
Other	3 (3.8%)

The percentage of coitus (once a week or more) was significantly increased from 31 women (38.75%) to 77 women (96.25%) (95%CI 0.54–0.98, $p < 0.05$) at 6 months after surgery (Table 7).

About the quality of sexuality (the normal sexual relations), it decreased from 43 women (53.8%) before surgery to 17 women (21.3%) (95%CI -1.11– -0.74,

Table 3. The indication for surgery of 80 women who had undergone TAH

The indication of surgery	Number (percent)
Uterus size larger than 12 wks size	31 (38.8%)
Progressive dysmenorrhea	6 (7.5%)
Hyper menorrhea or abnormal bleeding	31 (38.8%)
DUB with failed medication	1 (1.3%)
Chronic pelvic pain	9 (11.3%)
Other	2 (2.5%)

Table 4. Dyspareunia in 80 women who had undergone TAH

Frequency of dyspareunia	Before surgery	3 months after surgery	6 months after surgery
None of the time	7 (8.8%)	58 (72.5%)	76 (95%)
Little of the time	42 (52.5%)	22 (27.5%)	4 (5%)
Some of the time	21 (26.3%)	0	0
Most of the time	8 (10%)	0	0
All of the time	2 (2.5%)	0	0

Table 5. Frequency of sexual desire in 80 women who had undergone TAH

Frequency of sexual desire	Before surgery	3 months after surgery	6 months after surgery
Every day or almost	1 (1.3%)	0	0
2-3 days per week	5 (6.3%)	2 (2.5%)	6 (7.5%)
1 day per week	38 (47.5%)	43 (53.8%)	65 (81.3%)
1-2 days per month	31 (38.8%)	31 (38.8%)	9 (11.3%)
less than 1 day per month	3 (3.8%)	3 (3.8%)	0
not at all	2 (2.5%)	1 (1.3%)	0

Table 6. Masturbation in 80 women who had undergone TAH

Frequency of masturbation	Before surgery	3 months after surgery	6 months after surgery
Every day or almost	0	0	0
2-3 days per week	0	0	0
1 day per week	2 (2.5%)	0	0
1-2 days per month	2 (2.5%)	0	0
less than 1 day per month	76 (95%)	6 (7.5%)	2 (2.5%)
not at all	0	74 (92.5%)	78 (97.5%)

Table 7. Frequency of coitus in 80 women who had undergone TAH

Frequency of coitus	Before surgery	3 months after surgery	6 months after surgery
Every day or almost	1 (1.3%)	0	0
2-3 days per week	5 (6.3%)	0	4 (5%)
1 day per week	25 (31.3%)	5 (6.3%)	73 (91.3%)
1-2 days per month	39 (48.8%)	1 (1.3%)	3 (3.8%)
less than 1 day per month	2 (2.5%)	22 (27.5%)	0
not at all	8 (10%)	52 (65%)	0

$p < 0.05$) 3 months after surgery, but increased to 68 women (85%) (95%CI 0.20–0.47, $p < 0.05$) 6 months after surgery. Two women (2.5%) were not sexually active before surgery. All of the women were sexually active after surgery.

Discussion

It is important to understand that gynecologic diseases are related to genital organs and Total Abdominal Hysterectomy (TAH) is the most common gynecologic operation performed to treat those diseases.

Some studies reported that hysterectomy might affect women's sexuality in particularly sexual functioning and the overall quality of sexuality^(2,4,9,11-14).

To know clearly about the sexuality after TAH, we studied the frequency of sexual desire, masturbation, coitus, dyspareunia and the quality of sexuality (sexual relations) after TAH with or without unilateral salpingo-oophorectomy. Because of the change in body image after bilateral salpingo-oophorectomy and decrease of female hormone, it related to a decreased libido^(3,5,15). In addition, we selected the patients equal or less than 45 years old to prevent menopausal effects. However, the sexuality after the operation depended on the emotional maturity of the women and cultural attitudes about the importance of genital organs relative to her concept of being a woman^(6,16). However, we could not find these effects in this study, because we designed pre and post study for the same person excluding the confounding effects from environment, culture, and the sexual partners that support the validity of this study.

Considering of sexual desire, the frequency of sexual desire was significantly increased six months after surgery. This was supported by many previous studies and indicated that hysterectomy had a positive impact on libido^(3,11,12,16).

The frequency of coitus was significantly increased six months after surgery, but was decreased three months after surgery. The study by Gath et al⁽¹⁷⁾

found that 80% of sexuality became the same as before the operation after 4 months. After a follow up at 18 months, the sexuality was the same as six months. In contrast, the study by Kilkku et al⁽⁴⁾ observed no significant decreases in sexual activity after hysterectomy. The results showed significant increases in sexual activity after TAH and may be the strongest evidence of a positive effect of hysterectomy on sexual function. This is because improved sexual functions and increased sexual enjoyment were the most obvious explanation for increased sexual relations after TAH. However, the frequency of coitus may be varied in some women because coital activities need a good sexual partner relationship as explained in Helstrom et al study⁽¹⁰⁾.

After TAH, dyspareunia was significantly reduced, as in many previous studies^(4,10,11). These results improved the quality of sexuality, sexual enjoyment and sexual relations significantly six months after surgery. In contrast, Helstrom et al study⁽¹⁰⁾ reported that the overall quality of sexuality to be unchanged and Dennerstein et al study⁽¹⁸⁾ reported that the overall quality of sexuality to be worse, and was associated with anxiety after TAH. However, in this study, 23 women (28.8%) decreased their sexuality before surgery due to anxiety about the disease and was resolved after TAH.

Limitations of the study included the symptoms as well as the Thai cultural limitation. Due to the sensitivity of the subject, the research questions and sexual outcomes could not easily to be collected. We used the questionnaires in sealed envelopes to protect the patients privacy and allow them to answer truthfully. We used a prospective study to reduce recall bias and selection bias by collected data from all of the patients within the inclusion criteria; nobody was excluded from the study.

The results of this study showed that sexuality after TAH was improved because all of the patients had at least one ovary intact, less anxiety about disease, and about sex after TAH. The physician should pro-

vide more comprehensive care for their patients, not only for the diseases but also for the emotional problems. The results of this study should assure the surgeon into counseling the patients before the operation.

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ผลกระทบต่อเพศสัมพันธ์ภายหลังจากผ่าตัดมดลูกทางหน้าท้องในโรงพยาบาลศรีนครินทร์

อุทุมพร ภูษชอภัย, โกวิท คำพิทักษ์

วัตถุประสงค์: เพื่อศึกษาผลกระทบต่อเพศสัมพันธ์ภายหลังจากผ่าตัดมดลูกทางหน้าท้องในโรงพยาบาลศรีนครินทร์
ชนิดของการวิจัย: การวิจัยเชิงพรรณนา

สถานที่ที่ทำการวิจัย: โรงพยาบาลศรีนครินทร์ คณะแพทยศาสตร์ มหาวิทยาลัยขอนแก่น

วัสดุและวิธีการ: ผู้หญิงอายุน้อยกว่าหรือเท่ากับ 45 ปีที่มีการวางแผนผ่าตัดมดลูกทางหน้าท้องด้วยข้อบ่งชี้เป็นโรคชนิดไม่ร้ายแรง รวมถึงอาจผ่าตัดรังไข่ด้วย 1 ข้าง ตั้งแต่ธันวาคม พ.ศ. 2547 ถึง พฤษภาคม พ.ศ. 2549 อุปกรณ์ที่ใช้ในการวิจัย คือ แบบสอบถาม ประกอบด้วยข้อมูลพื้นฐานและการประเมินผลต่อเพศสัมพันธ์ ตั้งแต่ก่อนผ่าตัดในโรงพยาบาล และภายหลังจากผ่าตัดมดลูกทางหน้าท้อง 3 และ 6 เดือน ความถี่ของ dyspareunia, sexual desire, coitus, masturbation, and the quality of sexuality ภายหลังจากผ่าตัดมดลูกทางหน้าท้องเป็นตัววัดที่สำคัญ

ผลการศึกษา: ความถี่ของ dyspareunia ก่อนผ่าตัด ร้อยละ 91.25 ลดลงเหลือร้อยละ 5 หลังผ่าตัด 6 เดือน (95%CI 1.19 -1.61, $p < 0.05$) ความถี่ของ sexual desire เพิ่มขึ้นจากร้อยละ 55 ก่อนผ่าตัด เป็นร้อยละ 88.75 หลังผ่าตัด 6 เดือน (95%CI 0.22-0.61, $p < 0.05$) ความถี่ของการมีเพศสัมพันธ์ เพิ่มขึ้นจากร้อยละ 38.75 ก่อนผ่าตัด เป็นร้อยละ 96.25 หลังผ่าตัด 6 เดือน (95%CI 0.54-0.98, $p < 0.05$) ผู้หญิงที่มีเพศสัมพันธ์ตามปกติ มีจำนวนเพิ่มขึ้นจากร้อยละ 53.8 ก่อนผ่าตัด เป็นร้อยละ 85 หลังผ่าตัด 6 เดือน (95%CI 0.20-0.47, $p < 0.05$)

สรุป: ผลต่อเพศสัมพันธ์ภายหลังจากผ่าตัดมดลูกทางหน้าท้อง พบว่าดีขึ้นอย่างมีนัยสำคัญในทุกด้าน การที่มี Sexual activity เพิ่มขึ้น เป็นปัจจัยสำคัญที่สนับสนุนว่าการผ่าตัดมดลูกทางหน้าท้องไม่มีผลกระทบต่อเพศสัมพันธ์
