Research Article

Gynecology & Reproductive Health

Post-operative Quality of Life Assessment after Total Abdominal Hysterectomy

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ABSTRACT

Rationale: *Hysterectomy is one of the commonest major gynecological surgeries carried out in Sri Lanka for benign gynaecological conditions. As a definitive treatment method, it is important to assess whether total abdominal hysterectomy improves the domains of patient's quality of life.*

Objective: *The main objective was to assess the improvement in quality of life after total abdominal hysterectomy (TAH).*

Method: *This was a descriptive cross sectional study, carried out in two centres; a teaching hospital and a peripheral hospital at central province, Sri Lanka. Data were collected from a total of 46 patients who underwent TAH. The health related quality of life (HRQoL) was assessed by using a pre-tested, interviewer guided questionnaire based on the Standard Form-36 (SF-36) prior to surgery and six months after the surgery.*

Results: *Majority of patients had TAH for non-malignant conditions (89%). Out of 46 patients, 38 (82.6%) reported an improvement in their general health while 8 (17.4%) did not experience any improvement. Those who had limitations in their routine activities reported a notable improvement; travelling by 90.7%, dressing by 93.7% and bathing by 96.2%. On a scale of 1 to 10, mean improvement in psychological status was 9.15 (±1.93). Improvement in women's participation in social gatherings was 21.5%. Impact on work attendance was shown by a reduction in number of women taking leave being dropped to zero from 15.2%. There was no significant improvement in sexual frequency, dyspareunia and interaction with the sexual partner. The mean level of post-surgical satisfaction, which was assessed by a scale of 1 to 10, was 9.2 (±1.2).*

Conclusion: *In symptomatic women with poor response to conservative treatment, total abdominal hysterectomy may improve quality of life and reduce psychiatric symptoms.*

Keywords
Benign gynaecological conditions, Health-related quality of life, Total abdominal hysterectomy.

Introduction
Total abdominal hysterectomy involves removal of the uterus together with cervix using an abdominal approach. Most commonly it is performed in women of reproductive age [1]. About 40% of women all over the world will have hysterectomy by the age of 64 years and indication for the majority will be to relieve symptoms and improve quality of life [2]. More than half of all hysterectomies are carried out because of abnormal uterine bleeding, which is associated with a wide range of diagnoses including leiomyomas, endometriosis, adenomyosis, ovulatory dysfunction, coagulopathy and disorders of endometrial haemostasis, some of which were previously classified as dysfunctional uterine bleeding [3]. These conditions can cause a diversity of physical symptoms and can have an immense influence on a woman's quality of life.

It is now generally recognized that the functional impact of clinical interventions on patients' lives is important in predicting demand for services, and that it is not sufficient to simply measure outcome of clinical intervention in terms of morbidity and mortality [4]. In most studies reporting on surgical procedures, emphasis often lies on morbidity outcome measures such as operation time, surgical complications, hospital stay, and recurrence rate. However, from the patient's point of view, outcome measures related to health status and quality of life such as symptom resolution, return to normal activities, and patient satisfaction are at least as important as the classical outcomes [5]. These Health-related quality of life (HRQoL) variables measured prospectively and concurrently, complement mortality and morbidity measures [4].

Health-related quality of life (HRQoL) is a multi-dimensional concept that encompasses domains related to physical, mental, emotional and social aspects related to a disease or its specific therapeutic approaches [6]. According to the definition introduced by the World Health Organization, quality of life is defined as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" [7].

Quality of life is an important outcome variable especially in surgery for benign gynaecological conditions, as medical interventions can affect it in both positive and negative ways. Most women reported a reduction in physical symptoms and pain and an increase in health perceptions after hysterectomy [8]. However, hysterectomy may also result in the development of new problems such as pelvic/abdominal pain, urinary problems, constipation, weight gain, fatigue, lack of interest or enjoyment in sex, depression, anxiety and negative feelings about oneself as a woman [9].

Although there is a paucity of information regarding HRQoL, hysterectomy is still one of the commonest major gynecological surgeries carried out in Sri Lanka. Therefore, as a definitive treatment method, it is important to assess whether total abdominal hysterectomy improves the domains of patient's quality of life. As HRQoL refers to an individual's total wellbeing, having a proper understanding on this subject allows provision of accurate information to the patient during pre- and postsurgical counseling, thereby enhancing the appropriateness of treatment and care.

Methods
This was a descriptive cross sectional study, carried out in two centres; a teaching hospital and a peripheral hospital at central province, Sri Lanka. The main objective was to assess the improvement in quality of life after total abdominal hysterectomy (TAH). A sample size of 50 was obtained by using the relevant formula. All women undergoing TAH were offered participation in the study. The consented patients were interviewed prior to the surgery. General information like age, marital status, educational status, occupation, menstrual history and indication for surgery were collected first. Their health related quality of life (HRQoL) was assessed by using a pre-tested, interviewer guided questionnaire based on the Standard Form-36 (SF-36) [10]. The questionnaire assessed the health in general, physical impact of symptoms on activities of daily living, impact on sexual health, psychological impact, social and occupational impact.

Total abdominal hysterectomy was carried out in all patients by a consultant gynaecologist or by a post-graduate trainee in obstetrics and gynaecology (registrar or senior registrar) under the direct supervision of the consultant gynaecologist. All the patients were interviewed six months after the surgery to assess the health related quality of life with reference to the same domains of HRQoL which were assessed pre-operatively.

Data was entered into an on-going Microsoft Excel work sheet. The statistical analysis was done by using SPSS statistical software v20. Between the pre-operative and post-operative assessments, the percentage difference in the domains of HRQoL were analysed. The percentage improvement or worsening in general health, physical symptoms (e.g. abdominal pain, bleeding and pelvic pain), and limitation of activities of daily living, sexual health and psychological health were analysed before and after surgery. Similar analysis was carried out with regard to social and occupational aspects as well. Mean level of post-surgical satisfaction was assessed by a scale of 1 to 10.

Results
Data was collected from a total of 46 patients as 4 patients were not available for follow-up. The mean age of the group was 46.7 (±7.2) years and 7 (15.2%) out of them were post-menopausal. Main indication for surgery was leiomyoma; 19 (41%) patients, followed by dysfunctional uterine bleeding in 15 (37%) patients (Figure 1). Patients with no definable structural or histological cause for bleeding were classified as dysfunctional uterine bleeding.

Out of 46 patients, 38 (82.6%) reported an improvement in their general health while 8 (17.4%) did not experience any

improvement. None of the patients complained about worsening of general health after TAH. The improvement in general health was assessed as fair (28%), good (30%) and very good (25%) (Figure 2).

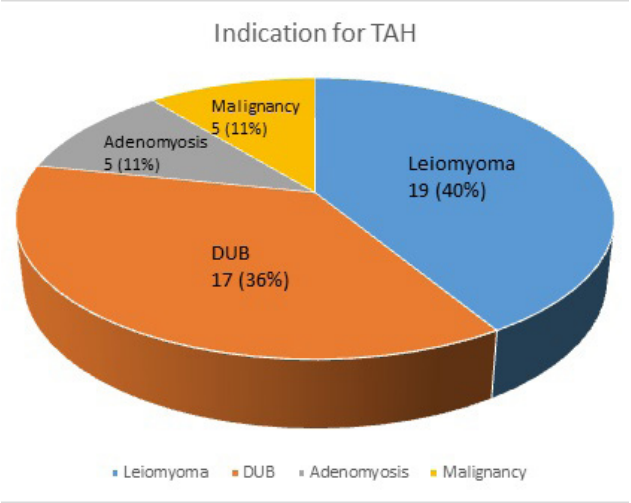

Figure 1: Indication for Total Abdominal Hysterectomy.

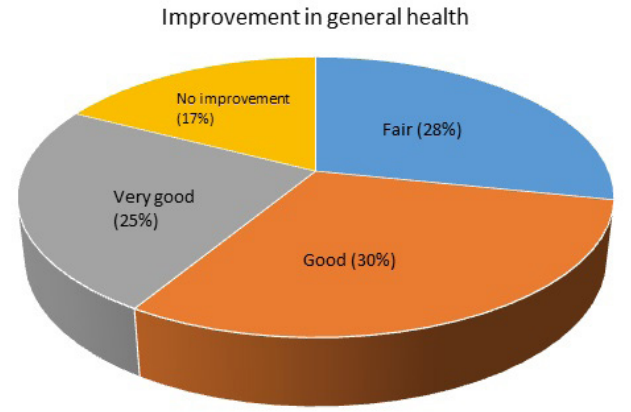

Figure 2: Improvement in general health.

There was a remarkable improvement in symptoms following total abdominal hysterectomy. A 100% improvement was noted in vaginal bleeding following surgery while pelvic pain improved by 82.8% and abdominal pain improved by 70.4% compared to the previous status (Figure 3).

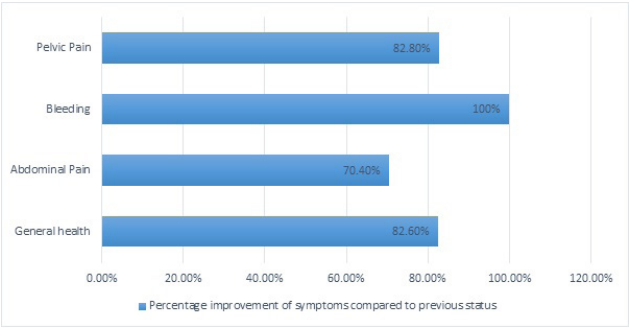

Figure 3: Improvement in symptoms following total abdominal hysterectomy.

We also observed an improvement in activities of daily living following total abdominal hysterectomy. Those who had limitations in their routine activities reported a remarkable improvement; travelling by 90.7%, dressing by 93.7% and bathing by 96.2% (Figure 4).

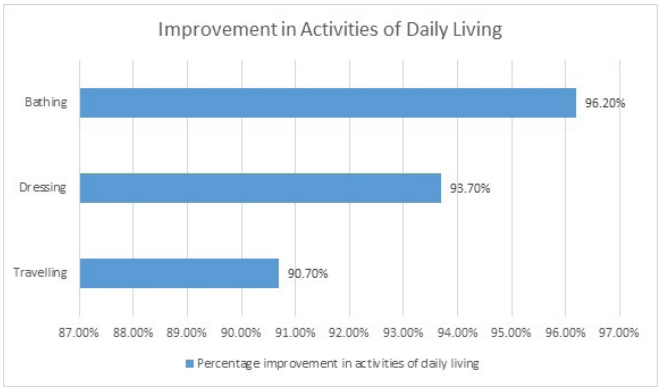

Figure 4: Improvement in activities of daily living.

There was no significant improvement in the sexual frequency, dyspareunia or interaction with the sexual partner. 13 out of 46 patients (28.2%) had dyspareunia prior to surgery. 7 patients (53.8%) reported a complete recovery from dyspareunia while rest of the 6 patients (46.2%) had a partial recovery.

31 (67.4%) patients suffered from psychiatric disturbances due to their illnesses prior to surgery. On a scale of 1 to 10, the mean improvement in psychological status following TAH was 9.15 (±1.93).

The impact on work attendance was shown by a reduction in number of women taking leave being dropped to zero from 15.2% pre-operatively. There was a 21.5% improvement in women's participation in social gatherings after the TAH. Mean level of post-surgical satisfaction, which was assessed by a scale of 1 to 10, was 9.2 (±1.2).

Discussion

As evident by this study, majority of hysterectomies are carried out for non-malignant conditions where health-related quality of life becomes an important outcome variable. Concerning the health in general, 38 (82.6%) patients did experience an improvement in their general health with more than 50% reporting a good or a very good improvement. Only 8 (17.4%) patients remained at the same general health six months after the TAH. In this group, the presence of other health co-morbidities might have contributed to the sense of general health. None of the patients complained about worsening of general health after TAH. This explains that majority of women who have undergone a hysterectomy benefit from the procedure with a minority not experiencing a difference. Previous studies have shown that around 8% of the women who underwent hysterectomy reported the same or increased number of symptoms [11].

The main contributor for the improvement in general health

was the relief from the agonizing symptoms. In the absence of surgical complications, all patients were totally cured from abnormal vaginal bleeding. A remarkable improvement was noticed in abdominal and pelvic pain following surgery which could have been a major factor towards a better quality of life. Quality of life could be severely hampered by the limitations in the activities of daily living; a fact we observed in our subjects. Six months following TAH, our patients reported an outstanding improvement in routine daily activities especially travelling, bathing and dressing. Recovery from these limitations of activities and disabling symptoms is reflected on the fact that none of the patients had to take leave off work due to their illnesses following surgery. They also reported an improvement in participation in social gatherings which was previously restricted by their illness. Similar results in returning to normal health and bodily functions are observed in related research [12,13].

Though we expected to find a major improvement in sexual function after surgery, this study did not prove a statistically significant change in quality of sexual life after the operation with regard to sexual frequency, dyspareunia and interaction with the sexual partner. Although previous study data support viewpoint that most probably women will neither lose their sexual desire after hysterectomy, nor they will lose their feminine shape or style [14], there might be other contributory factors to explain this finding. The social and cultural background, negative thoughts about sexuality after long-standing suffering from the disease and lack of accurate information might be implicated in quality of sexual life after the TAH. However, sexuality after hysterectomy is still a cause of great anxiety among patients and continuous ambiguity for health care providers.

Hysterectomy has traditionally been considered to be associated with adverse psychiatric sequelae [15]. However, most of the earlier studies were retrospective analyses with inadequate measures of outcome. More recent studies have shown that hysterectomy does not lead to a significant increase in symptoms of psychiatric illness [16,17]. Indeed, some studies have found that psychiatric symptoms decreased after hysterectomy for all women, regardless of type of hysterectomy whether subtotal or total (4). In our study, 31 (67.4%) patients suffered from psychiatric disturbances due to their illnesses prior to surgery and they all reported an improvement in psychological status after the surgery. On a scale of 1 to 10, the mean improvement in psychological status following TAH was 9.15 (±1.93).

This study has a number of limitations. Although only two centers were involved, a variety of surgeons performed the operations. Majority of operations were performed by Consultant Gynaecologists and post-graduate trainees performed the operation under direct supervision of a Consultant Gynaecologist. Nevertheless, this may well limit the external validity of the study. The possibility of surgical complications associated with a major gynaecological surgery like TAH should not be under-estimated although we did not encounter any during the study period.

It is possible that women may have improved regardless of surgery within the six-month follow-up period and we were unable to assess this in the absence of a control group of women who did not undergo surgery. Therefore, we acknowledge that our results should be replicated on a wider scale before our recommendations can be generalized.

Laparoscopic hysterectomy is gaining popularity in many countries and some studies have observed that with a follow-up of 4 years, patients who underwent laparoscopic hysterectomy reported better quality of life compared with patients undergoing abdominal hysterectomy [18]. In Sri Lanka, laparoscopic hysterectomy is not widely available and it is hard to find an adequate number of patients for comparison.

Conclusion

In symptomatic women with menstrual or related disorders where conservative treatment has failed, total abdominal hysterectomy may improve quality of life and reduce psychiatric symptoms. However, the complications associated with a major gynaecological surgery should not be under-estimated.

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