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ORIGINAL ARTICLE

Clinical Outcomes and patient Satisfaction after Vaginal versus Abdominal Hysterectomy for benign Gynecological Conditions

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ABSTRACT

Background: One of the most common operations done to the gynecological system is hysterectomy, which is performed when the disorder is benign. The decision-making of the surgical path is critical in deciding the outcomes of the perioperative period, the postoperative healing, and patient satisfaction. Hysterectomy of the vagina and abdomen is a common practice that is mainly used in cases involving tertiary care but there is a lack of comparative local data assessing their clinical outcomes and patient satisfaction.

Materials and Methods: The retrospective study was comparative and done in the department of Obstetrics & Gynaecology, Watim Medical & Dental College, Islamabad. Reviewed medical records of 120 women aged 30-65 years old with benign gynecological conditions that had hysterectomy between January 2023 and June 2023. The surgical approach was used to categorize the patients into two groups (vaginal hysterectomy, n = 58, and abdominal hysterectomy, n = 62). The collected data were demographic details, operative indication, operative time, estimated blood loss, post operative complications, hospital stay, and patient satisfaction recorded in the follow- up records. The data were analyzed by means of SPSS version 25, and the independent t-tests and the chi-square tests were used to make the comparisons.

Results: The vaginal hysterectomy had been related to a substantially reduced time of operation, less intraoperative bleeding, lesser duration of stay, and less occurrence of complications after surgery in comparison to the abdominal hysterectomy (p 0.05). The vaginal hysterectomy group showed much higher levels of patient satisfaction, earlier return of ability to resume normal daily activities and cosmetic results.

Conclusion: Vaginal hysterectomy has better clinical disaster and greater patient satisfaction than abdominal hysterectomy in the case of benign gynecological problems and must be viewed as the method of choice surgery in the right patients.

Keywords: Vaginal hysterectomy; Abdominal hysterectomy; Patient satisfaction; Clinical outcomes.

INTRODUCTION

Hysterectomy still is among the most widely done major gynaecological surgeries across the world and is often recommended to benign conditions like the presence of uterine fibroids, abnormal uterine bleeding, adenomyosis and uterovaginal prolapse. The surgical practice is a crucial factor that defines the perioperative or postoperative outcomes, patient satisfaction. Some of the common methods are vaginal hysterectomy and abdominal hysterectomy, which are commonly used especially in low and middle-income health care facilities since they might not have access to highly sophisticated methods of carrying out the procedures[1].

Hysterectomy of the abdomen has long been the main method particularly when there is a large uterine size, adhesion of the pelvis or in situations where the adnexal pathology occurs co-morbidly. It is however linked to bigger incision, more postoperative pain, extended hospitalization, delayed ambulation, and increased chances of wound related complication. All these may have adverse effects on patient recovery and satisfaction, and less invasive surgical options are becoming more and more popular[2].

Vaginal hysterectomy, conversely, is commonly considered one of the least invasive procedures which do not involve an abdominal incision. It is linked to lower operative morbidity and reduced hospital stay, inclusion of an earlier normal activities resumption, and the decreased overall healthcare costs. In spite of these benefits, the application of vaginal hysterectomy in most of the environments is still under-explored because of the surgeon choice, lack of training, perceived technicality, and fear of intraoperative complications[3,4].

The clinical outcomes that include the operative time, blood loss, postoperative pain, infection rates and the length of hospital stay are critical parameters that should be used to compare the surgical approaches. Very significant but is rarely emphasized is patient satisfaction that involves physical healing, mental health, cosmetic and the general sense of care. Patient-reported outcomes are gaining importance as one of the predictors of surgical success and quality of healthcare delivery[5].

A number of studies have recommended use of vaginal hysterectomy to provide better clinical outcomes in patients with benign gynecological conditions that are selected appropriately. These researches have lesser postoperative complications and shorter recovery periods than abdominal hysterectomy. Nevertheless, patient differences, surgical skills, and medical facilities can also affect patient outcomes, indicating the necessity of situation-specific analysis[6].

The choice of the best and patient-oriented surgical method is especially significant in developing countries where the set of resources is limited and the number of patients is large. There is a lack of local data to compare vaginal and abdominal hysterectomy, which often leads to the use of foreign evidence, which might not capture the practice patterns, patient expectations, and the possibilities of the healthcare system in the local area[7,8].

The evaluation of the clinical and patient satisfaction is a complex evaluation of the advantages and disadvantages of vaginal and abdominal hysterectomies in comparison to each other. These evidences may inform surgeons on the proper surgical path to take, needless to say they may help them to counsel patients and aid in the assessment of the evidence-based decision.

Objective: The research will provide local information by assessing the postoperative results and patient satisfaction in comparison to these two most frequently used hysterectomy methods in benign gynecological diseases.

MATERIALS AND METHODS

Study design and setting: The study was a retrospective comparative study carried out in Department of Obstetrics & Gynaecology, Watim Medical & Dental College, Islamabad. Hysterectomy medical records of patients who had hysterectomies in cases of benign gynaecological conditions were examined.

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Duration of study: The patients that have undergone surgical procedures between 1st January 2023 and 30th June 2023 were included in the study.

Population and size of sample of study: One hundred and twenty patients met the inclusion criteria and were enrolled in the research. The patients were classified according to the method of surgery done; vaginal hysterectomy (n = 58) and abdominal hysterectomy (n = 62). The study used non-probability consecutive sampling and enrolled all the qualified patients within the study period.

Inclusion and exclusion criteria: They included women aged between 30 and 65 years with hysterectomy due to benign gynaecological conditions such as uterine fibroids, abnormal bleeding of the uterus, adenomyosis and uterovaginal prolapse. The study excluded patients who had hysterectomy due to malignant or premalignant lesion, emergency hysterectomies, laparoscopic and laparoscopic-assisted vaginal hysterectomies, and patients with incomplete medical records.

Data collection procedure: After the institutional ethical review committee gave the consent, the data were obtained in the hospital medical records with the help of a structured data collection proforma. The variables that were recorded were age, surgery indication, type of hysterectomy, operative time, estimated blood loss during the operations, blood transfusion, postoperative pain, length of stay in the hospital, and postoperative complication; wound infection, febrile morbidity, and urinary tract injury. The evaluation of patient satisfaction was made in the context of postoperative outpatient follow-up records comprising symptom relief, restoration of normal functioning, aesthetic satisfaction, and a general outlook about the outcome of the surgical treatment.

Data analysis: The Statistical Package of Social Sciences version 25 was used to enter and execute the analysis of data. Quantitative variables were stated in terms of mean and standard deviation whereas categorical variables represented in frequencies and percentage. There were comparisons between vaginal and abdominal hysterectomy groups done through the independent t-test of continuous variables and chi-square test of categorical variables. The level of p-value that was considered as significant was 0.05.

RESULTS

The study covered 120 patients who had hysterectomy due to benign gynecological conditions. Among them, 58 patients (48.3%) had vaginal hysterectomy and 62 patients (51.7%) had abdominal hysterectomy. The average age of patients at vaginal hysterectomy was 46.2±6.8 years and in abdominal hysterectomy was 44.9-7.3 years. The difference in the age distribution in the two groups was not statistically significant ($p > 0.05$). Table 1 summarizes baseline demographic and clinical.

The uterine fibroids, abnormal bleeding on the uterus, adenomyosis and uterovaginal prolapse were the most frequent signs that led to the hysterectomy. The vaginal route was more often used in managing uterovaginal prolapse, and uterine fibroids could be treated more often through the abdominal one. Table 2 indicates distribution of indications based on surgical route.

The intraoperative and postoperative clinical outcomes were compared and it was found that the vaginal hysterectomy group had much shorter operative time as well as lower estimated blood loss and shorter length of stay in the hospital than the abdominal one ($p \leq 0.05$). There was also less need of blood transfusion and general postoperative complication rate in the vaginal hysterectomy group. Table 3 provides these clinical outcomes.

Table 1: Baseline Demographic Characteristics of Patients (n = 120)

Variable	Vaginal hysterectomy (n = 58)	Abdominal hysterectomy (n = 62)	p-value
Age (years), mean ± SD	46.2 ± 6.8	44.9 ± 7.3	>0.05
Parity, mean ± SD	4.1 ± 1.3	3.8 ± 1.5	>0.05

Table 2: Indications for Hysterectomy According to Surgical Approach

Indication	Vaginal hysterectomy n (%)	Abdominal hysterectomy n (%)
Uterovaginal prolapse	24 (41.4)	8 (12.9)
Uterine fibroids	12 (20.7)	28 (45.2)
Abnormal uterine bleeding	14 (24.1)	16 (25.8)
Adenomyosis	8 (13.8)	10 (16.1)

Table 3: Comparison of Clinical Outcomes Between Study Groups

Outcome	Vaginal hysterectomy	Abdominal hysterectomy	p-value
Operative time (minutes), mean ± SD	72.4 ± 15.6	98.7 ± 18.9	≤0.05
Estimated blood loss (ml), mean ± SD	210 ± 65	340 ± 90	≤0.05
Hospital stay (days), mean ± SD	2.6 ± 0.9	4.8 ± 1.2	≤0.05
Blood transfusion required n (%)	4 (6.9)	12 (19.4)	≤0.05
Postoperative complications n (%)	6 (10.3)	14 (22.6)	≤0.05

Table 4: Patient Satisfaction Outcomes

Satisfaction parameter	Vaginal hysterectomy n (%)	Abdominal hysterectomy n (%)	p-value
Early return to daily activities	48 (82.8)	34 (54.8)	≤0.05
Mild postoperative pain	46 (79.3)	30 (48.4)	≤0.05
Cosmetic satisfaction	52 (89.7)	28 (45.2)	≤0.05
Overall satisfaction	50 (86.2)	32 (51.6)	≤0.05

Patient satisfaction was more in patients who had been undergoing vaginal hysterectomy. A higher percentage of patients in this category reported a reduction in the postoperative pain, an increase in the general satisfaction, and early resumption to daily activities than the patients who underwent abdominal hysterectomy. The overall patient satisfaction in the two groups was statistically significant ($p \leq 0.05$). Table 4 presents the results on patient satisfaction.

DISCUSSION

The current research was comparing clinical outcomes and patient satisfaction after vaginal and abdominal hysterectomy in case of benign gynecological conditions and revealed that vaginal hysterectomy had better perioperative results and more satisfaction with patients. Patients who had vaginal hysterectomy had a shorter operation time, less bleeding, shorter hospitalization and fewer post operative complications as compared to their counterparts who underwent abdominal hysterectomy. The results are in line with the increasing body of work that vaginal hysterectomy is a safe and effective surgical procedure when properly indicated[9-11].

Surgical morbidity depends on such factors as operative time and intraoperative blood loss. Vaginal hysterectomy in this study took up much less operating time and also had a reduced blood loss rate as compared to the abdominal one. These benefits can be explained by the fact that there will be no need in an abdominal incision and tissue dissection, which will reduce surgical trauma. A decrease in blood loss also worked out to the lower need of blood transfusion, which further positively impacted the perioperative safety[12,13].

Postoperative recovery and use of healthcare resources on length of hospital stay is an important indicator. The vaginal hysterectomy group of patients stayed in the hospital significantly less time and thus mobilized much earlier and were able to resume normal activities. Shorter hospitalization does not only enhance patient satisfaction and comfort but also lowers the cost to the healthcare systems which is specifically pertinent in tertiary care hospitals with high volumes[14,15].

More often, postoperative complications were noted in patients who had abdominal hysterectomy. This group had more

wound-related complications, febrile morbidity, and delayed recovery, which were presumably because of the larger incision and more handling of tissues. Conversely, the vaginal method does not use abdominal lacerations hence minimizes the chances of infection and post surgical pain. These results support the clinical utility of vaginal hysterectomy with regard to decreased morbidity[16,17].

Patient satisfaction was greatly attributed to the individuals who had been subjected to vaginal hysterectomy. The results were higher scores in satisfaction, which was predominantly led by a reduction in postoperative pain, promptness to daily activities, and cosmetic results. Patient-reported outcomes are gradually becoming vital elements of surgery success, and the findings of this study demonstrate the necessity of taking the patient-focused issues into consideration in addition to the usual clinical indicators to choose the route of surgery in case of hysterectomy[18].

The route of hysterectomy usually is based on preferential based on surgeon choice, training, and perceived technical complexity and not an evidence based guideline. Although the benefits have been demonstrated, vaginal hysterectomy has not been used widely in most settings. The results of this research highlight the importance of enhancing the practice and belief in vaginal approaches to surgery that can result in better outcomes and satisfaction of a significant percentage of women who have hysterectomies due to benign diseases[19].

The application of a retrospective data enabled the assessment of actual results in a tertiary-care unit, which is a part of the everyday routine. Nonetheless, some level of reporting bias might have been created as a result of dependency on medical records to determine patient satisfaction. However, the general tendency to use vaginal hysterectomy over various outcome measures enhances the general findings of this research[20].

Limitations: This research has its limitations. It is retrospective in nature, which constrains the ability to control the completeness of data and possible confounding factors. Patient satisfaction was evaluated using documented follow up record instead of standardized questionnaire, a factor that can compromise on the accuracy of measurement. The research was a case study on one tertiary care hospital and this would not generalize the results of the study. Moreover, such long-term results as the quality of life and the functionality of the pelvic floor were not measured. It is advisable that future prospective, multicenter research that involves validated patient-reported outcome measures should be conducted to further support these results and inform clinical practice.

CONCLUSION

The present research finding is that vaginal hysterectomy has superior clinical results and increase patient satisfaction, than abdominal hysterectomy in case of benign gynecological disorders. The vaginal method resulted in shorter operational period, less blood loss, fewer post-operative complications, shorter hospitalization, and an earlier recovery to normal lifestyles. These benefits together with excellent cosmetic results and patient satisfaction make vaginal hysterectomy the procedure of choice in a well-selected patient. Improved implementation of this strategy by increasing surgical education and evidence-based decision-making can lead to better patient-centered care in tertiary care units.

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