

Research Article

Comparative study between vaginal and abdominal hysterectomy

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ABSTRACT

Objectives: To compare the quality of life between vaginal hysterectomy and abdominal hysterectomy in patients admitted in obstetric and Gyane units of Nishtar Hospital, Multan.

Study design: Randomized Control Trial.

Settings and duration: Department of Obstetrics and Gynecology from August 2016 to March 2017.

Results: Mean age of the patients was 49.82 ± 3.207 years, mean age of the patients of group A was 49.82 ± 3.193 years. and mean age of the patients of group B was 49.82 ± 3.256 years. Satisfactory quality of life was noted in 38 (84.44%) patients of study group A and 29 (64.44%) patients of study group B. Statistically significant ($P = 0.051$) difference between the frequency of satisfactory quality of life between the both groups was noted.

Conclusion: Results of this study reveals that post hysterectomy quality of life found more satisfactory in Vaginal hysterectomy group as compared to Abdominal hysterectomy group. Insignificant association of post hysterectomy quality of life with age group, marital status, parity and socio-economical status was found. Findings of this study also revealed that post hysterectomy satisfactory quality of life is not associated with education of the patients.

Key words: Hysterectomy, Quality of life, abdomen, vagina, WHO, Uterus

INTRODUCTION

Hysterectomy is one of the major surgical procedure and there are many indications to perform this procedure like obstetrical or gynecological reasons.¹ The main purpose of this procedure is to improve the quality of life (QoL) of the patients.² Hystrectomy can be performed by abdominal or vaginal route.³⁻⁴ Some studies reported that vaginal hysterectomies are performed in only in 10% patients and abdominal hysterectomies are performed in 70% patients.⁴⁻⁵

The only formal guideline available is the uterine-size guideline by ACOG in 1989, which suggests that vaginal hysterectomy is most appropriate in women with mobile uteri not larger than 12 weeks' gestational size (approximately

280 g).⁶ ACOG also acknowledges that the choice of approach should be based on the surgical indication, the patient's anatomic condition, data supporting the approach, informed patient preference, and the surgeon's expertise and training.⁶

There is convincing evidence that vaginal hysterectomy is preferable when either the vaginal or abdominal route is clinically appropriate.⁷

Abdominal approach is not as popular as previously now a days. In modern obstetrics and gynaecology, it is considered as better option because it has great convenience in hospital stay

complications patient's economy and finally morbidity and mortality.⁸

This study will be conducted to compare the quality of life between vaginal hysterectomy and abdominal hysterectomy in patients admitted in obstetric and gynaecological units. Results of this study will guide us that which method will be better for maintaining the post-operative quality of life of the patients undergoing vaginal or abdominal hysterectomy.

OPERATIONAL DEFINITION

Post hysterectomy satisfactory quality of life:

Satisfactory quality of life was labeled as positive when the patients answer more than equal to 70% of the question positively (8/12 questions).

Abnormal Uterine Bleeding (AUB):-

Any amount of bleeding without any clinically detectable organic pelvic pathology-tumor, inflammation or pregnancy.

VISUAL ANALOGUE SCALE

Visual Analogue Scale is a measurement instrument that tries to measure the amount of pain that a patient feels, which ranges across a continuum from none to an extreme amount of pain.

(No pain) 0 1 2 3 4 5 6 7 8 9 10 (Worst Pain)

MATERIAL AND METHODS

This randomized controlled trial was conducted at Department Obstetrics and Gynecology from August 2016 to March 2017. Total 90 patients with dysfunctional uterine bleeding with failed medical treatment, having age from 45-55 years, uterus of less than 14 weeks size (on ultrasound), patients requiring hysterectomy for benign pathology. (on ultrasound and histopathology) and primary para, multipara were selected for this study.

Patients with pelvic malignancy (on scan), cardiac diseases (On history), bronchial asthma (On history), hypertension (On history) and patients with pelvic inflammatory disease (on history)

were excluded from the study. Selected patients were randomly divided into two groups A and B.

In group A vaginal hysterectomy was performed and in Group B abdominal hysterectomy was performed. Hysterectomies (vaginal or abdominal) was performed by consultant gynecologist having experience at having least 5 years). Demographic data of all the patients was entered in performa. After one month follow-up, 12 questions were asked from all patients to assess their satisfactory quality of life in terms of yes or no.

All the data was entered in SPSS V17 for statistical analysis. Quantitative variables like age and QoL score were presented as mean \pm SD. Quality of life was assessed through pre-designed questionnaire. Frequencies and percentages of each question will be calculated for marital status, socio-economic status, education level, parity and satisfactory quality of life. Effect modifiers like age, marital status, socio-economic status, education level, parity were controlled through stratification. Chi-square test was applied to compare the frequencies of satisfactory quality of life among the both groups. P value \leq 0.05 was considered as significant.

RESULTS

Total 90 patients were selected for this study. Mean age of the patients was 49.82 ± 3.207 years, mean age of the patients of group A was 49.82 ± 3.193 years, and mean age of the patients of group B was 49.82 ± 3.256 years. Comparison of satisfactory quality of life between Group A and Group B was done. In study group A, satisfactory quality of life was noted in 38 (84.44%) patients and in study Group B, satisfactory quality of life was noted in 29 (64.44%) patients. Statistically significant (P = 0.051) difference between the frequency of satisfactory quality of life between the both groups was noted. (Table 1)

Out of 27 patients of age group 45-50 years, satisfactory quality of life was noted in 23 (85.19%) patients. Out of 26 patients of age group 45-50 years, satisfactory quality of life was noted in 18 (9.23%) patients. Statistically insignificant (P = 0.2021) difference of

satisfactory quality of life was noted between the both study groups. Out of 18 patients of age group 51-55 years, satisfactory quality of life was noted in 15 (83.33%) patients. Out of 19 patients of age group 51-55 years, satisfactory quality of life was noted in 11 (57.89%) patients. Statistically insignificant ($P = 0.1510$) difference of satisfactory quality of life was noted between the both study groups. (Table 2)

In group A, 39 patients were married and in group B, 41 patients were married. Satisfactory quality of life noted in 32 (82.05%) patients and 27 (65.85%) patients respectively in group A and B. Statistically insignificant ($P = 0.1296$) difference between satisfactory quality of life was noted between the both study groups. Total 6 patients of group A and 4 patients of group B was unmarried. Satisfactory quality of life was noted in 6 (100%) patients of group A and 2 (50%) patients of group B and the difference was statistically insignificant with p value 0.1333. (Table 3)

There were 9 primaryparas in group A and 12 in group B. Satisfactory quality of life was noted in

9 (100%) patients of group A and 8 (66.67%) patients of group B but the difference was insignificant with p value 0.1038. There were 36 multiparas in group A and 33 in group B. Satisfactory quality of life was noted in 29 (80.56%) patients of group A and 21 (63.64%) patients of group B but the difference was insignificant with p value 0.1771. (Table 4)

In group A and B, 16 and 13 patients were poor and satisfactory of life was noted in 13 (81.25%) patients and 10 (76.92%) patients. But the difference was insignificant with p value 1.0000. In group A and B, 11 and 18 patients were belonged to middle class and satisfactory of life was noted in 9 (81.82%) patients and 8 (44.44%) patients. But the difference was insignificant with p value 0.0641. In group A and B, 18 and 14 patients were belonged to high class and satisfactory of life was noted in 16 (88.89%) patients and 11 (78.57%) patients. But the difference was insignificant with p value 0.6313. (Table 5)

Table 1: Comparison of satisfactory of life between the both groups

| Group | Satisfactory quality of life | | Total | P value |
|-------------------------------|------------------------------|--------------|-------|---------|
| | Yes | No | | |
| A (Vaginal hysterectomy) | 38 (84.44) | 7 (15.56) | 45 | 0.051 |
| B (Abdominal hysterectomy) | 29 (64.44) | 16 (.56) | 45 | |

Table 2: Comparison of satisfactory quality of life between the both groups for age

| Group | Satisfactory quality of life | | Total | P value |
|------------------------------|------------------------------|--------------|-------|---------|
| | Yes | No | | |
| Age group 45-50 years | | | | |
| A | 23 (85.19) | 4 (14.81) | 27 | 0.2021 |
| B | 18 (9.23) | 8 (30.77) | 26 | |
| Age group 51-55 years | | | | |
| A | 15 (83.33) | 3 (16.67) | 18 | 0.1510 |
| B | 11 (57.89) | 8 (42.11) | 19 | |

Table 3: Comparison of satisfactory quality of life between the both groups for marital status

| Group | Satisfactory quality of life | | Total | P value |
|------------------|------------------------------|---------------|-------|---------|
| | Yes | No | | |
| Married | | | | |
| A | 32 (82.05) | 7 (17.95) | 39 | 0.1296 |
| B | 27 (65.85) | 14 (34.15) | 41 | |
| Unmarried | | | | |
| A | 6 (100) | 0 | 6 | 0.1333 |
| B | 2 (50) | 2 (50) | 4 | |

Table 4: Comparison of satisfactory quality of life between the both groups for primarypara

| Group | Satisfactory quality of life | | Total | P value |
|---------------------|------------------------------|---------------|-------|---------|
| | Yes | No | | |
| Primaryparas | | | | |
| A | 9 (100) | 0 | 9 | 0.1038 |
| B | 8 (66.67) | 4 (33.33) | 12 | |
| Multiparas | | | | |
| A | 29 (80.56) | 7 (19.44) | 36 | 0.1771 |
| B | 21 (63.64) | 12 (36.36) | 33 | |

Table 5: Comparison of satisfactory quality of life between the both groups for socio-economic status

| Group | Satisfactory quality of life | | Total | P value |
|------------------------------|------------------------------|---------------|-------|---------|
| | Yes | No | | |
| Poor patients | | | | |
| A | 13 (81.25) | 3 (18.75) | 16 | 1.0000 |
| B | 10 (76.92) | 3 (23.08) | 13 | |
| Middle Class Patients | | | | |
| A | 9 (81.82) | 2 (18.18) | 11 | 0.0641 |
| B | 8 (44.44) | 10 (55.56) | 18 | |
| High class patients | | | | |
| A | 16 (88.89) | 2 (11.11) | 18 | 0.6313 |
| B | 11 (78.57) | 3 (21.43) | 14 | |

DISCUSSION

Hysterectomy is the surgical procedure which is performed in Gynaecology departments for malignant and benign conditions.¹⁰ Many types of

hysterectomies are there in different indications. Mainly vaginal and abdominal one. Few other techniques are also becoming popular including laparoscopic assisted vaginal, total and

subtotallaparoscopic hysterectomies. Modern approach is minimally invasive which provide better choice for doctors and patients. However, it relies on patient's health and over all conditions. Psychological needs of the patients is the utmost priority for the doctors now a days particularly future life of the patients.¹¹ Vaginal, laparoscopic or abdominal approaches all are available but debatable as well. Final decision of hysterectomy is depend upon hysterectomy indication, patient anatomy, patient concern, surgical expertise etc.¹¹ Mostly vaginal hysterectomy is performed in patients having good uterine activity, uterus size not greater than 12 weeks of gestation. No history of pelvic surgery, normal adnexa, wide maternal pelvis and at the end there should be no anesthetic or surgical contra indication in this approach.¹²⁻¹³

In present study comparison of satisfactory quality of life between Group A (vaginal hystrectoly) and Group B (abdominal hysterectomy) was done. In study group A, satisfactory quality of life was noted in 38 (84.44%) patients and in study Group B, satisfactory quality of life was noted in 29 (64.44%) patients. Statistically significant (P = 0.051) difference between the frequency of satisfactory quality of life between the both groups was noted.

In one study by Silva-Filho et al, satisfactory quality of life was found in 65.5% patients who underwent vaginal hysterectomy and 90% patients who underwent abdominal hysterectomy.⁹

After intensive search on internet, only one study was found comparing the satisfactory quality of life between vaginal hysterectomy and abdominal hysterectomy. No other study is available on this topic.

CONCLUSION

Results of this study reveals that post hysterectomy quality of life found more satisfactory in Vaginal hysterectomy group as compared to Abdominal hysterectomy group. Insignificant association of post hysterectomy quality of life with age group, marital status, parity and socio-economical status was found.

Findings of this study also revealed that post hysterectomy satisfactory quality of life is not associated with education of the patients.

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