

Research Article

Histopathological Report of Hysterectomy Specimens in a Tertiary Care Hospital

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Abstract: Background: The lifetime risk of hysterectomies ranges from 20% to 35% 1-3. With the surge of medicolegal law suits, risk of premature surgical menopause after hysterectomy, surgical and anaesthetic risks involved and availability of alternative noninvasive management options, every effort should be made to avoid hysterectomy wherever possible. Clinico-pathological audit of hysterectomies can help us define and improve our standards of diagnosis and justification of the hysterectomies performed.

Objective: To explore the pre-operative diagnosis, surgery performed and histopathological findings in Shaheed Tazuddin Ahmad Medical College & Hospital, Gazipur, Bangladesh.

Methods: The Study was conducted in the department of obstetrics and gynaecology of Dhaka Medical College Hospital, Dhaka, Bangladesh to find out the common indications of hysterectomy. 100 cases were randomly selected for the study whose common indication of hysterectomy. Clinical examination and evaluation were done from October 2004 to February 2005. Other necessary investigations were done if clinically indicated and to prepare the patient for anesthesia. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22). **Results:** Majority of cases who underwent hysterectomy were 31-40 years (52%) of age. Out of 100 cases most of patients (70%) underwent abdominal hysterectomy and only 30 (30%) cases underwent vaginal hysterectomy. Out of 33 cases, clinically diagnosed as leiomyoma of the uterus histopathology revealed leiomyoma in 24 cases. In uncomplicated abdominal and vaginal hysterectomy, the duration of surgery was almost same, vaginal hysterectomies needs slightly longer time. Average hospital stay after operation was same. **Conclusion:** There were significantly fewer hysterectomies for malignancy and a higher rate of oophorectomies with hysterectomy in a tertiary care hospital.

Keywords: Histopathological, Hysterectomy, Tertiary Care Hospital.

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INTRODUCTION

In Bangladesh hysterectomies are performed having more or less similar indications as those perform in advanced countries. Because of the limited facilities and economic constraints, diagnosis of the cases is made more on the clinical grounds rather than on the modern investigations. Even in the clinical assessments, there are considerable problems as the patients are mostly illiterate and ignorant and they do not understand the gravity of their symptoms, often attain the doctor late and cannot explain their problems without leading questions. As a result the findings often does not co-relate with their complaints. The improved hospital care, availability of blood transfusion,

advanced anesthesia and above all the advent of antibiotics has opened up a new era and thereby broadened the indications for hysterectomy with minimum post-operative morbidity and mortality. However, hysterectomy must never be done without proper indication according to Taylor, hysterectomy should. Be done when the risk of preserving the uterus is greater than the risk of removal or when there are disabling symptoms for which there is no successful medical treatment. Vaginal Hysterectomy is advantageous over Abdominal Hysterectomy in removing uteri weighing ≤ 500 gm with comparable operating time, less post-operative pain and shorter recovery. LAVH showed a shorter recovery but longer

operating time than TAH and a 27% rate of conversion to laparotomy.

In our country hysterectomies are performed for more or less similar indication as those performed in advance countries, the only difference being in the evaluation of the patient pre-operatively. We have to diagnose the cases more on the clinical ground rather than modern investigations because of the limited facilities and economical constraint. Even in the clinical assessment there are considerable problems as the patients are mostly illiterate and ignorant. They do not understand the gravity of their symptoms, often attend the doctor late and cannot explain their problems without leading questions. As a result, the finding often does not correlate with their complaints. The study has been undertaken to find out the common indications of hysterectomy in our country, to detect the patterns of complications and to find out the correlation between clinical diagnosis, preoperative findings and histopathological reports of the 100-case studied.

METHODS

The Study was conducted in the department of obstetrics and gynaecology of Dhaka Medical College Hospital, Dhaka, Bangladesh to find out the common indications of hysterectomy. 100 cases were randomly selected for the study whose common indication of hysterectomy. Clinical examination and evaluation were

done from October 2004 to February 2005. Other necessary investigations were done if clinically indicated and to prepare the patient for anesthesia. Then the cases were again evaluated according to preoperative findings. Finally, the specimen was sent for histopathological examination and correlated with clinical and preoperative findings. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22).

RESULTS

Majority of cases who underwent hysterectomy were 31-40 years (52%) of age. The total study population was 100 Patients aged 21 years to ≥ 80 years, 6.0% were 21 years to 30 years, 52.0% were 31 years to 40 years, 28.0% were 41 years to 50 years, 6.0% were 51 years to 60 years, 5.0% were 61 years to 70 years and 3.0% were ≥ 80 years. Out of 100 cases most of patients (70%) underwent abdominal hysterectomy and only 30 (30%) cases underwent vaginal hysterectomy. Out of 33 cases, clinically diagnosed as leiomyoma of the uterus histopathology revealed leiomyoma in 24 cases. In uncomplicated abdominal and vaginal hysterectomy, the duration of surgery was almost same, vaginal hysterectomies need slightly longer time. Average hospital stay after operation was same.

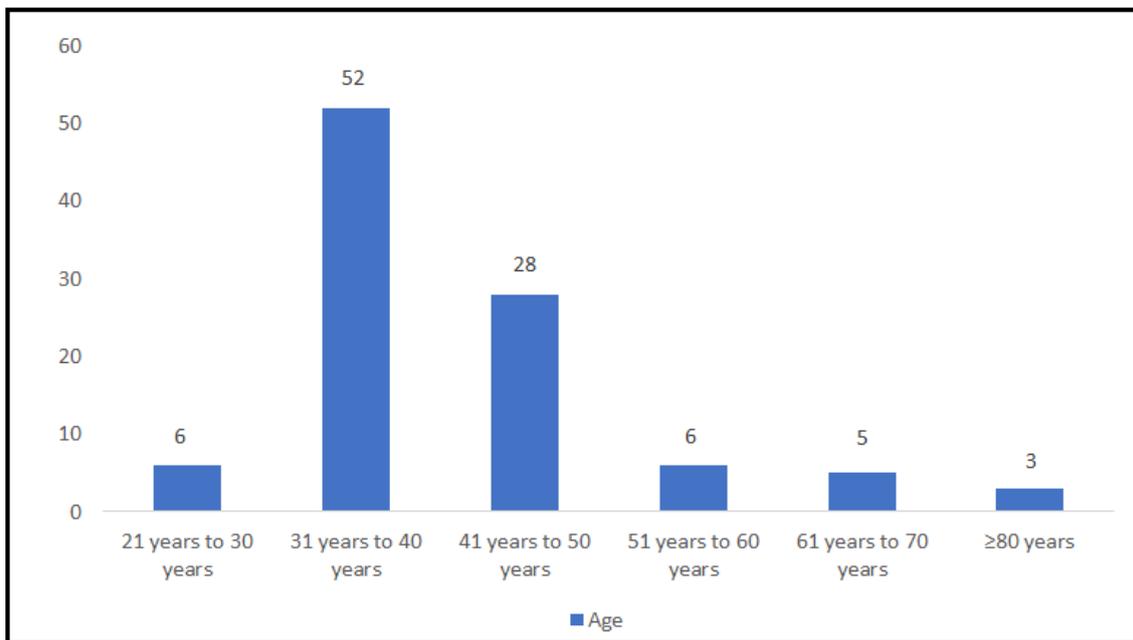


Fig-I: Demonstrated the distribution of study patients according to age

Table-I: Demonstrated the distribution of study patients according to Indication of Hysterectomy.

Indication of Hysterectomy	n=100	%
Leiomyoma of the uterus	33	33.0

Indication of Hysterectomy	n=100	%
Pelvic inflammatory disease	9	9.0
Ovarian Tumour	8	8.0
Dysfunctional uterine bleeding	6	6.0
Myomatous Polyp	4	4.0
Chronic Cervicitis	4	4.0
Endometriosis	3	3.0
Carcinoma Cervix	1	1.0
Adenomyosis	1	1.0
Persistent Trophoblastic tumour	1	1.0
Uterovaginal Prolapse	21	21.0
Uterovaginal prolapse with associated pathology	5	5.0
Non decent vaginal hysterectomy	2	2.0
LAVH	2	2.0

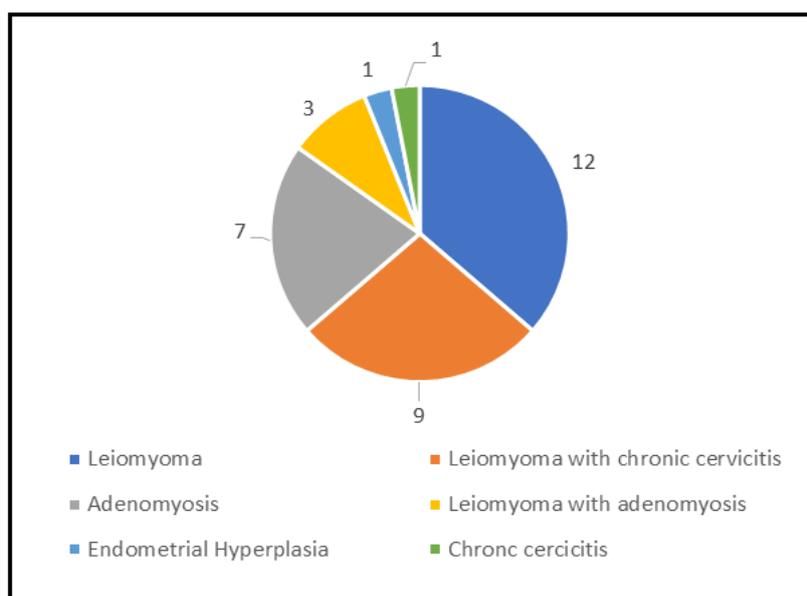


Fig-II: Demonstrated the distribution of study patients according to final diagnosis of Histopathology.

Table-II: Demonstrated the distribution of study patients according to clinical diagnosis and Histopathological diagnosis

Clinical diagnosis	Histopathological diagnosis	n=3	%
Endometriosis with right adnexal cyst	Adenomyosis with Chocolate cyst	1	33.33
Endometriosis	Chronic cervicitis	1	33.33
Endometriosis with cyst on anterior lop of cervix	Adenomyosis with endometriotic cyst	1	33.33

DISCUSSION

The most common indication for hysterectomy in our study was fibroid uterus which is in agreement with other reports in literature [16, 17]. Prolapse and menstrual disorders have also been reported as common indication [18, 19]. The indications were histopathologically verifiable in 50.7% cases and verified in 84% of these. Al-Nuaim *et al* reported a confirmation of preoperative diagnosis in 69% specimens [17]. However, in contrast, we did not include prolapsed uterus as a verifiable indication. Our study showed much fewer specimens with

unremarkable pathology (3.9%) in contrast to study by Jha *et al.* (38%) [18]. There were various incidental findings in a significant number of specimens which could have been detected pre-operatively. Adenomyosis was the most common finding missed preoperatively. Higher degree of suspicion and better technique may help in diagnosing the missed indications. The mention of all findings on histopathology request forms is important to correlate the pre and postoperative findings and justify the decision for hysterectomy.

This study has been performed to find the common indications, complications and morbidity of hysterectomy and to correlate the clinical presentation with the peroperative and histopathological findings. In the present study, it was observed that maximum number (80%) of hysterectomies was done in women between the ages of 31 - 50 years. Similar age incidence reported by almost similar findings were observed in other studies [6-10]. Regarding symptomatology, it was observed that abnormal menstrual flow was the single most common complaints other studies reported hysterectomy due to menstrual disorders [11-15].

Leiomyoma uterus was the most common indication (33%) of hysterectomy somewhat similar results were reported other studies [6-10]. Hysterectomy was done for 9% cases of PID. It showed wide variation in different studies. Richard C. Dicker 32 showed the incidence of 7.2% while Steven C. White 38 showed incidence of 1.6% Nancy C 36 showed 5% and some study showed the incidence 2%. Hysterectomies were done for DUB in 6% cases. It also showed a wide variation in different studies. In the present series out of 6% of DUB diagnosed pre-operatively, histopathology revealed associated pathology in 5 cases. Only in one case uterus and cervix showed normal architecture on histopathology.

Utero-vaginal prolapse was the indication of vaginal hysterectomy in 26% cases. In other studies, also observed almost similar findings. According to Shergill *et al.* 27 Pokras and Hufnagel 37 and was the indication for hysterectomy in 24% 20.8% and 27% respectively. In 25% cases of total abdominal hysterectomy bilateral salpingo oophorectomy has been carried out. In 58% cases both ovaries were preserved. And in 17% cases of total abdominal hysterectomy one ovary was preserved in women below 45 years having clinically healthy ovaries. In vaginal hysterectomy, ovaries had been retained after they had been detected normal on sonography but in one case patient had ovarian cyst which could not be removed vaginally and after vaginal hysterectomy laparotomy was done to remove that ovarian cyst. Out of 33 cases of clinically diagnosed leiomyoma was confirmed on histopathology in 24 cases. Adenomyosis was found in 7 cases, all of them presented with menorrhagia and associated dysmenorrhoea in every cases uterus was <12 wk size.

Out of 8 cases of ovarian tumour 6 cases were clinically diagnosed as benign ovarian tumour and 5 were confirmed as benign ovarian tumour on histopathology. In one case histopathology revealed granulosa cell tumour. 2 cases of clinically diagnosed malignant ovarian tumour were confirmed as malignant on histopathology. So, in most cases pre-operative clinical diagnosis was confirmed on histopathological

examination correlation observed in the study Hysterectomy for endometriosis showed a wide variation in incidence between the different series? Some studies both have shown incidence of 7% whereas Steven. C. White 38 has shown 1.3%. In the present series only 3 hysterectomies were done for external Endometriosis. The reason for these cases was that pre-operatively endometriosis is often not very easy to diagnose clinically.

In the present series 4 hysterectomies had been done for chronic cervicitis. In two cases there were associated PID. In all cases histopathology confirm the diagnosis. But chronic cervicitis was an associated findings in 11 cases of leiomyoma of the uterus, 3 cases of DUB, and 5 cases of PID 1 cases of endometriosis. In vaginal hysterectomy due to uterovaginal prolapse in all cases cervix showed feature of chronic cervicitis on histopathological examination. Regarding short term outcome vaginal hysterectomy was found to be advantageous in respect of cost of anesthesia and ambulation. Duration of operation was shortening in abdominal hysterectomy and duration of hospital stay was same in the both groups. Various other studies have shown similar outcome.

Regarding complications febrile morbidity was the commonest (9%) complication after hysterectomy followed by urinary tract infection (8%) Respiratory tract infection (4%) Similar complication rate was observed by some similar studies Abdominal wound infection was found 6% in Razia S. series 5% in Richard C. series 4% in Dewan F. Series. But in the present series there was no such complication.

CONCLUSIONS

There were significantly fewer hysterectomies for malignancy and a higher rate of oophorectomies with hysterectomy in tertiary care hospital. The most common indication for the age group 30 years to 50 years was fibroid uterus and for more than 60 years was prolapsed uterus. Majority of the verifiable causes of hysterectomy were confirmed on histopathology. Various incidental findings still presented in significant number of specimens.

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