

Original Research

Assessment of Histopathological findings among patients undergoing abdominal hysterectomy

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ABSTRACT:

Background: The current research was planned for assessing Histopathological findings among patients undergoing abdominal hysterectomy. **Materials & methods:** A total of 50 women who underwent planned abdominal hysterectomy during this timeframe were included in the analysis. The selection criteria encompassed all patients scheduled for elective hysterectomy, with data systematically collected using pre-structured proformas. These forms captured detailed demographic profiles and presenting clinical symptoms. For analytical clarity, only the most prominent clinical diagnosis was recorded as the primary indication for surgical intervention. Postoperatively, all hysterectomy specimens were preserved in 10% buffered formalin and were subjected to histopathological evaluation. The resulting pathology reports were meticulously. All the results were recorded in Microsoft excel sheet and was subjected to statistical analysis using SPSS software. **Results:** A total of 50 patients were evaluated. Mean age of the patients was 44.7 years. The clinical presentation among the 50 patients showed that menstrual-related problems were the most frequent complaint, reported by 66% (n=33) of the cohort. This was followed by abdominal pain in 52% (n=26), urinary symptoms in 24% (n=12), backache in 10% (n=5), and palpable abdominal lumps in 6% (n=3). These findings indicate that menstrual irregularities and abdominal pain are the predominant symptoms prompting clinical evaluation in this population. Histopathological evaluation of 50 specimens revealed that leiomyoma was the most common diagnosis, observed in 56% (n=28) of cases. Adenomyosis accounted for 20% (n=10), followed by endometriosis in 16% (n=8), and ovarian cysts in 8% (n=4). These findings underscore leiomyoma as the predominant pathology, reflecting its high prevalence among uterine lesions in symptomatic women. **Conclusion:** The predominant pathological finding among the hysterectomy specimens was leiomyoma, reaffirming its status as a leading indication for surgical intervention. Routine histopathological examination of all hysterectomy specimens is essential, as it not only confirms the clinical diagnosis but also plays a critical role in identifying incidental or occult malignancies. This practice ensures accurate postoperative management and facilitates timely therapeutic decisions, especially in cases where preoperative assessments may have overlooked underlying neoplastic conditions.

Key words: Hysterectomy, Histopathology, Leiomyoma

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INTRODUCTION

Abdominal hysterectomy is the ultimate standard operation among various gynecologic surgeries. However, the actual procedure for a patient varies substantially according to the morphological changes of the uterus and adnexa. Therefore, it is important to assess the deviation from standard and the difficulties in the procedure and to plan the modification of the operation at the preoperative conference.¹⁻³ Clinical conference before surgery is very important for the patient and the doctors. All of medical staffs, not only surgeons but also radiologists and pathologists if

possible, should gather and discuss the precise diagnosis and the operative procedure.⁴⁻⁶ In case of uterine fibroids, the preoperative assessment is especially important, because the clinical diagnosis is not pathological but just presumable. In fact, 5% of the cases diagnosed preoperatively as benign are pathologically not usual leiomyoma but tumors of other histology such as cellular leiomyoma, dissecting leiomyoma, intravenous leiomyomatosis, endometrial stromal sarcoma, smooth muscle tumor of uncertain malignant potential, and leiomyosarcoma.⁷⁻⁹ Yadav et al, in a previous study assessed 105 cases during this

period. The study included all women undergoing planned abdominal hysterectomy. Data was recorded on proformas, including demographic characteristics and clinical features. Of 105 cases, 55(52.38%) were in the age group of 41 – 50, which comprised the commonest age group undergoing the surgery. Maximum women (95%) those underwent hysterectomy were multiparous. Most common preoperatively clinical diagnosis was leiomyoma uterus which was diagnosed clinically and sonographically in 51(48.57%) cases. On Histopathological examination, the commonest pathology, similar to clinical impression, was found to be Leiomyoma at 50.48% (n = 53). Adenomyosis (21.90%) was detected as Second most common pathology. Histopathological confirmation of pre-operative diagnosis was 89% for malignancy, 96% for fibroids, 100% for adenomyosis, 100% for pelvic inflammatory disease. There was a high correlation when the clinical diagnosis was a fibroid, adenomyosis and ovarian mass.¹⁰Hence; the current research was planned for assessing Histopathological findings among patients undergoing abdominal hysterectomy.

MATERIALS & METHODS

This retrospective study was undertaken with the aim of evaluating gallbladder mucosal changes among gallstone patients undergoing laparoscopic cholecystectomy. A total of 50 women who underwent planned abdominal hysterectomy during this timeframe were included in the analysis. The selection criteria encompassed all patients scheduled for elective hysterectomy, with data systematically collected using pre-structured proformas. These forms captured detailed demographic profiles and presenting clinical symptoms. For analytical clarity, only the most prominent clinical diagnosis was recorded as the primary indication for surgical intervention. Postoperatively, all hysterectomy specimens were preserved in 10% buffered formalin and were subjected to histopathological evaluation. The resulting pathology reports were meticulously. All the results were recorded in Microsoft excel sheet and as subjected to statistical analysis using SPSS software.

RESULTS

A total of 50 patients were evaluated. Mean age of the patients was 44.7 years. The clinical presentation among the 50 patients showed that menstrual-related problems were the most frequent complaint, reported by 66% (n=33) of the cohort. This was followed by abdominal pain in 52% (n=26), urinary symptoms in 24% (n=12), backache in 10% (n=5), and palpable abdominal lumps in 6% (n=3). These findings indicate that menstrual irregularities and abdominal pain are the predominant symptoms prompting clinical evaluation in this population. Histopathological evaluation of 50 specimens revealed that leiomyoma was the most common diagnosis, observed in 56%

(n=28) of cases. Adenomyosis accounted for 20% (n=10), followed by endometriosis in 16% (n=8), and ovarian cysts in 8% (n=4). These findings underscore leiomyoma as the predominant pathology, reflecting its high prevalence among uterine lesions in symptomatic women.

Table 1: Clinical profile

Clinical profile	Number	Percentage
Menstrual related problem	33	66
Pain abdomen	26	52
Urinary symptom	12	24
Backache	5	10
Lump abdomen	3	6
Total	50	100

Table 2: Histopathological diagnosis

Histopathological Diagnosis	Number	Percentage
Leiomyoma	28	56
Adenomyosis	10	20
Endometriosis	8	16
Ovarian cyst	4	8
Total	50	100

DISCUSSION

Abdominal hysterectomy remains one of the most frequently performed surgical interventions in gynecology. It is primarily indicated for conditions such as dysfunctional uterine bleeding (DUB), uterine fibroids, endometriosis, and cervical intraepithelial neoplasia. Many patients undergoing this procedure present with moderate to severe anemia, primarily due to chronic and unaddressed uterine bleeding in the absence of timely and appropriate medical management.⁵ ⁶In traditional abdominal hysterectomy, intraoperative hemorrhage presents a significant challenge, often resulting from trauma or inadvertent retraction or slippage of the uterine and ovarian arteries. Additionally, the risk of ureteric injury remains a critical concern. These complications are particularly worrisome in resource-limited rural healthcare settings, where access to advanced infrastructure and emergency services such as blood transfusion may be limited. Consequently, meticulous surgical technique and thorough preoperative planning are vital to ensure patient safety and reduce operative morbidity in such environments.⁷ ⁸Although alternatives to hysterectomy result in fewer procedures performed annually, and the use of endoscopic techniques and vaginal hysterectomy have resulted in a lower percentage performed by the open abdominal route, certain pelvic disorders require abdominal hysterectomy. Preoperative evaluation with informed consent and surgical planning are essential to select appropriate candidates. Prophylactic antibiotics, thromboprophylaxis, attention to surgical technique, and enhanced recovery protocols should be used to provide optimal outcomes.⁹Hence; the current

research was planned for assessing Histopathological findings among patients undergoing abdominal hysterectomy.

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missed pathology preoperatively. Patients operated with a preoperative diagnosis of DUB had least HPE correlation. Unremarkable HPE was found in 12.5% cases, all were operated for uterovaginal prolapse. Justification of hysterectomy is proved when the HPE report is compatible with the preoperative diagnosis; hence HPE of all hysterectomy specimens should be done and analyzed.¹²

CONCLUSION

The predominant pathological finding among the hysterectomy specimens was leiomyoma, reaffirming its status as a leading indication for surgical intervention. Routine histopathological examination of all hysterectomy specimens is essential, as it not only confirms the clinical diagnosis but also plays a critical role in identifying incidental or occult malignancies. This practice ensures accurate postoperative management and facilitates timely therapeutic decisions, especially in cases where preoperative assessments may have overlooked underlying neoplastic conditions.

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