ORIGINAL ARTICLE

Clinico-Pathological Correlation of Hysterectomy Specimens For Abnormal Uterine Bleeding – A Five Year Study At Tertiary Care Centre

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ABSTRACT
BACKGROUND: hysterectomy specimen is commonest specimen comes in histopathology laboratory in day to day practice. **OBJECTIVE:** In this study we try to make an effort to most common pathologies identified in hysterectomy specimens and to correlate the findings with the clinical indications. **MATERIAL AND METHOD:** Hysterectomy specimens received in our pathology department in duration of five years (January 2011 and December 2015) are considered in this study. **RESULT:** A total of 1520 hysterectomy specimens were received during study period. The patient's age range was 25-75 years with a mean of 50 years old. Most common pathologies are leiomyoma and adenomyosis. **CONCLUSION:** In five years analysis of all cases it was found that preoperative diagnosis and histopathological correlation could reduce the number of hysterectomies as in many cases conservative approach could have been followed

Key Words: Hysterectomy, Adenomyosis, Leiomyoma.

INTRODUCTION

Hysterectomy is one of the most common surgical procedures in peri and postmenopausal women.[1] Since early 20th century, hysterectomy is a definitive treatment of pelvic pathology. Hysterectomy is considered a life saving procedure in women with certain types of cancer and in acute uterine hemorrhage.[2] The increase in the number of hysterectomies may be attributed to prophylaxis against uterine cancer, mild genital prolapse, premenopausal menorrhagia[2] Hysterectomy, however, must never be done without proper indications. According to Dicker, Hysterectomy should be performed when the risk of preserving the uterus is greater than the risk of it's removal or when there are disabling symptoms for which there is no successful medical treatment.[3] In this study we want to review the pattern of uterine pathologies in order to identify the most common uterine pathologies in our region and correlate them with their clinical indications.

MATERIAL AND METHOD

The record of patients who had hysterectomy and their specimens in the period between January 2011 and December 2015 were retrieved and studied. The diagnosis was extracted from the pathology reports and the histological slides were reviewed, whenever there was uncertainty about the final diagnosis. In cases of more than one pathologic diagnosis, both diagnoses were counted by including them separately in their assigned category. In addition, the total number of hysterectomy specimens with more than one pathology and the commonest pathologic combinations were calculated. Patient's age, clinical presentation and clinical indication, as well as the type of hysterectomy were reviewed. The correlation between the clinical and true pathologic diagnosis was estimated. We include Patients with age 25-75 years with Gynecological conditions which failed to respond medical treatments.

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RESULT AND OBSERVATION

A total of 1520 hysterectomy specimens were retrieved between January 2011 and December 2015. The patient's age range was 25-75 years with a mean of 50 years old.

Figure:1:Routesof Hysterectomy
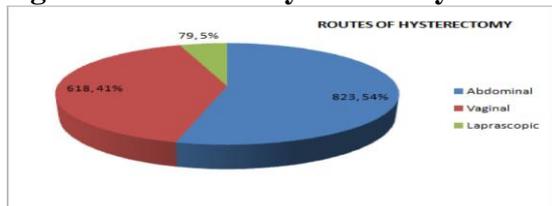
Results are tabulated in table 1 to 4.

Table 1: Clinical Indications For Hysterectomies

Clinical Indication	Number Of Cases	Percentage
Uterine Leiomyoma	627	41.25%
Therapeutic & follow up hysterectomies for previous and present gynecological malignancies	43	2.83%
Dysfunctional uterine bleeding(DUB)	200	13.15%
Polyp(Endometrial and cervical)	135	8.88%
Adenomyosis	165	10.85%
Endometrial Hyperplasia	137	9.01%
Emergency hysterectomies for postpartum hemorrhage or placenta accreta.	41	2.69%
Hysterectomy during operation of non-gynecological malignancies	3	0.19%
Uterine Prolapse	71	4.67%
Chronic pelvic pain	51	3.35%
Combined indications	47	3.09%

Table 2: Pattern & Frequency Of Uterine Pathologies Identified In 1520 Hysterectomy Cases

Pathology Identified	Number	Percentage
Leiomyoma	681	44.80%
Adenomyosis	332	21.84%
Polyp	119	7.83%
Uterovaginal prolapsed	71	4.68%
Gynecological malignancies	31	2.04%
Disordered proliferative e., atrophic e., simple hyperplasia, chronic endometritis	112	7.36%
Uterine congestion in peripartum hemorrhage(PPH) and placenta accrete	79	5.20%
Combined pathologies	95	6.25%

Table 3 : Clinical Diagnosis

S.NO.	NAME OF STUDY	1ST MOST COMMON DIAGNOSIS	%	2ND MOST COMMON DIAGNOSIS	%	3RD MOST COMMON DIAGNOSIS	%
1	LAYLA(2006)[2]	Therapeutic & follow up hysterectomies for previous and present gynecological malignancies	27.9	Uterine Leiomyoma	24.5	DUB	16.2
2	ARCHNA BHOSLE(2010)[4]	Fibroid	49.1	DUB	43.8	Adenomyosis	7.6
3	SHAKIRA(2008)[5]	DUB	27.7	Leiomyoma	22.2	Pelvic Pain	16.6
4	SOBANDE(2005)[6]	DUB	57.5	Pelvic mass	19.3	Abdomino-pelvic mass	18.7
5	OZAN TURGUT(2014)[7]	Abnormal Uterine bleeding	75	Uterine Leiomyoma	12.5	Endometrial Hyperplasia	6.25
6	Present study	Uterine leiomyoma	41.25	DUB	13.15	Adenomyosis	10.85

Table 4:Histological Diagnosis

S.N	NAME OF STUDY	1st MOST COMMON DIAGNOSIS	%	2nd MOST COMMON DIAGNOSIS	%	3rd MOST COMMON DIAGNOSIS	%
1	LAYLA(2006)[2]	Leiomyoma	34	Adenomyosis	18.4	Endometrial polyp	13.4
2	BHOSLE(2010)[4]	Fibroid	55	Adenomyosis	29.4	DUB	16.4
3	SHAKIRA(2008)[5]	Leiomyoma	59.2	Adenomyosis	24	Leiomyoma and Adenomyosis	9.2
4	SOBANDE(2005)[6]	Uterine Fibroid	25.8	Adenomyosis	22.7	Endometrial carcinoma	2.8
5	OZAN TURGUT (2014)[7]	Leiomyoma	46.8	Adenomyosis	12.5	Endometrial Hyperplasia	9.38
6	Present study	Leiomyoma	44.80	Adenomyosis	21.8	Polyp	7.83

DISCUSSION

The most common clinical indication for hysterectomy in present study is uterine leiomyoma(41.25%), also known as fibroid. Archana B(2010) et al[4] shows fibroid as most common indication for hysterectomy. Other studies[5,6,7]show dysfunctional uterine bleeding (DUB) is a common cause for women in the reproductive age group that consulted to a doctor. Histologically, leiomyoma is common diagnosis in all of studies (Table4). Clinical and histological comparisons of indication shows that leiomyoma clinically diagnosed in 41.25% cases while it was histologically diagnosed in 44.80% while adenomyosis diagnosed

only in 10.85% cases and histologically it was diagnosed in 21.84%.So, adenomyosis is missed in 11 % of cases. In present study, abdominal hysterectomy is most common route of hysterectomy. Other study[6] study also shows abdominal hysterectomy is commonly performed procedure. Abdominal route is associated with longer hospital stay, increased complications and higher cost; but due to practice of styles, training habits and performances of gynecologist, most of the gynecologists still continue to use the abdominal approach for hysterectomies that could be performed vaginally. Since vaginal hysterectomy carries less risk and complications, this route is encouraged especially if the disease is confined to uterus and the uterine weight is less than 280gm[8] Hysterectomy is a successful operation in terms of symptom relief and patient satisfaction. It provides a definitive cure to many diseases involving the uterus as well as adnexae like fibroids, DUB, adenomyosis, endometriosis, pelvic inflammatory disease and pelvic organ prolapse, and malignancy. Hysterectomy is the most common gynecological surgery in the world.[9] It provides definitive cure to many diseases like DUB, leiomyoma, adenomyosis, endometriosis, pelvic inflammatory disease, prolapse, and malignancy.[9]It remains a matter of debate owing to physical, emotional, economics, sexual, and medical significance to women.[10] In a study conducted in USA by Broder et al. indications for nononcological and nonemergency hysterectomy were found to be inappropriate.[11] Several questions about the indications, probable overuse, and justification of hysterectomy have been raised. Thus evaluation of appropriateness of hysterectomy should be integral part of audit. The system of reviewing preoperative diagnosis and histopathological report provide an efficient means of quality assurance and the appropriateness of surgery. This study emphasizes the need for regular audit of indications of hysterectomy with pathological findings which can help recognize malpractice and lacunae in the knowledge of health care provider. In present study mean age of the patient is 50

years. One study[7] shows age average of the patients was 48.18±5.87 (39-67) and other study shows[9] mean age was 45.6 years. Average age is above 40 years but we can avoid hysterectomies by disseminating awareness among peripheral centers for early referral of high risk obstetric cause and with conservative approach.

CONCLUSION

This study highlights the fact that reporting of all hysterectomies should be made mandatory and audit results should be used for improvement in quality of health services. As any surgical procedure hysterectomy is also associated with risk factors, thus indications should be carefully evaluated. Thus implementing targeted actions and conservative therapy for benign gynecological conditions should be effective alternatives to hysterectomies.

REFERENCES:

1. Khan R, Sultana H. How does histopathology correlate with clinical and operative findings in abdominal hysterectomy. JAFMC 2010 ;6(2); 17-20.
2. Abdullah LS.Hysterectomy : A Clinicopathologic Correlation Bahrain Medical Bulletin 2006; 28(2):1-5.
3. 3.Dicker RC, Sealy MJ, Greenspan JR. Hysterectomy among women of reproductive age trends in United States. JAMA 1990; 248: 328-335.
4. Archana B, Michelle F.Evaluation and Histopathological Correlation of Abnormal Uterine Bleeding in Perimenopausal Women Bombay Hospital Journal 2010 ; 52(1): 69-72.
5. Shakira P, Subhana T. A Clinicopathological Review of Elective Abdominal Hysterectomy. Journal of Surgery Pakistan 2008; 13 (1) :26-29.
6. Sobande AA, Eskander M, Archibong EI, DamoleIO. Elective hysterectomy :A clinicopathological review from Abha catchment area of Saudi Arabia.WAJM 2005; 24(1) :31-35.
7. Ozan Turgut, Serdar Yanık, Aybala Agac , Isin Gencay. The Evaluation of Preoperative and Histopathologic Diagnosis in Specimens of Hysterectomy Performed for Benign

Conditions. Journal of Surgery 2014; 2(1):11-13.

8. Kovac S. Hysterectomy outcomes in patients with similar indications. Obstet Gynecol.2002; 95: 787-93.

9. Gupta G, Kotasthane DS, Kotasthane VD. Hysterectomy: a clinico-pathological correlation of 500 cases. Internet Journal of Gynecology and Obstetrics 2010; 14:1-6.

10. Magon N, Chahuan M. Editorial. Subtotal Hysterectomy: has it come a full circle. International Journal of Clinical Cases and Investigations 2012; 4:1–4.

11. Broder MS, Kanouse DE, Mittman BS, Bernstein SJ. The appropriate-eness of recommendations for hysterectomy. Obstetrics & Gynecology 2000; 95(2):199–205.