

Histopathological Analysis Of Hysterectomy Specimens In Women Of Different Age Groups

Dr Anjana Mittal* , Dr Shweta Sharma *

*Md Pathology, Jaipur

Abstract: Background: Abnormal uterine bleeding is of considerable clinical significance because of its numerous causes. Uterine fibroid , polyp , adenomyosis , endometrial hyperplasia and malignancies are common causes for abnormal uterine bleeding. Material & Method: The present study was carried out on total of 424 hysterectomy specimens of patients with AUB during period of January 2018 to July 2019 . Data including age , symptoms and clinical indication for hysterectomy was collected and the histopathological findings were correlated. Result: Women in the perimenopausal age (41 – 50 yrs) accounted for the highest number of cases (74.05%) presenting with symptoms of AUB. Adenomyosis was found to be the most common cause of abnormal uterine bleeding in women of perimenopausal age group. Conclusion: Adenomyosis was found to be the most common cause of abnormal uterine bleeding in perimenopausal age group. [Mittal A, Sharma S Natl J Integr Res Med, 2020; 11(1):26-27]

Key Words: Abnormal uterine bleeding , Leiomyoma and Adenomyosis

Author for correspondence: Dr Shweta Sharma, MD Pathology, E-Mail: dr.angelshweta@gmail.com
Mobile: 09829332844

Introduction: Abnormal uterine bleeding in any period of life is considered serious and is also the common cause of iron deficiency anemia in our country especially in the reproductive age group (1). The uterus is prone to develop several non neoplastic and neoplastic conditions during the life time of a woman(2). Most common complains presented are per vaginal bleeding , vaginal discharge , pain in lower abdomen , irregular menstruation , post menopausal bleeding etc (3). Many medical and conservative surgical treatments are available but hysterectomy still remains the widely accepted and practical treatment of choice. The purpose of our study was to find the prevalence of adenomyosis and leiomyoma as the cause of AUB by histopathological examination. AUB is the common presentation but unfortunately it cannot be ruled out solely on clinical ground and a confirmative diagnosis by histopathological examination is required.

Material And Methods: A descriptive study was carried out during the period of January 2018 to July 2019 in a district of Jaipur. During this period 541 hysterectomy specimens were received. Out of this 424 cases were included in our study. Inclusion criteria were women with complain of AUB for which hysterectomy was done. Vaginal and abdominal hysterectomies done for complains other than AUB and malignancies were excluded from the study. Data of these patients were collected in relation to patient age , presenting symptoms and clinical indication for hysterectomy. On gross examination uterus size with any abnormality was noted i.e fibroid , polyp , hemorrhage , endometrium thickness etc.

Representative sections were taken fixed in 10% formalin , routinely processed and stained with haematoxylin and eosin stains. Slides were examined microscopically.

Results: A total of 424 cases were included in the study. Age of patients ranged from 30 to 60 yrs. The largest group (n = 314) was of perimenopausal age (41 – 50yrs) contributing to 74.05 % of total cases in the study. (Table 1)

Table 1: Age Distribution Of Patients Presented With Complain Of Abnormal Uterine Bleeding

Age (yrs)	No of cases	Percentage
31 – 40	43	10.14%
41 – 50	314	74.05%
51 – 60	67	15.80%
Total	424	100%

In this age group adenomyosis was the commonest pathology (n = 119) followed by leiomyoma (n= 85) whereas (n = 29) showed dual pathology of adenomyosis and leiomyoma. (Table 2)

Table 2: Distribution Of Patients According To Age And Histopathological Diagnosis.

Age (yrs)	Adenomyosis	Leiomyoma	Both
31- 40	31	40	06
41- 50	119	85	29
51-60	55	51	08

In our study, maximum cases revealed adenomyosis as the histopathological lesion (n =205) in women who presented with abnormal uterine bleeding.(Table 3)

Table 3: Table Showing Number Of Cases For Each Histopathological Diagnosis.

Histopathological Diagnosis	No Of Cases	Percentage
Adenomyosis	205	48.34 %
Leiomyoma	176	41.50 %
Dual Pathology	43	10.14 %
Total	424	100

Discussion: The etiology of AUB is multifactorial. The most common histopathological diagnosis for AUB are adenomyosis and leiomyoma. Adenomyosis is characterized by the presence of endometrial glands and stroma within the myometrium. Often round masses of myometrial smooth muscle proliferation present around endometrial islands. Stromal adenomyosis (incomplete adenomyosis , adenomyosis with sparse glands) is characterized by lack of glands , it is rare and difficult to diagnose. Leiomyoma are most frequent benign uterine tumors that develop during a woman's reproductive years and occurrence tends to regress after menopause.

Transabdominal ultrasonography doesn't allow reliable diagnosis of adenomyosis, even transvaginal ultrasonography has limitation in tissue characterization⁴. MRI is more helpful to diagnose adenomyosis but is expensive, whereas it is very useful diagnostic tool in cases with fibroid uterus. Most of the cases of leiomyoma present with PV bleeding, dysmenorrhea, mass in the lower abdominal area etc². Adenomyosis is a diagnosis made after hysterectomy by histopathology. Since the symptoms of adenomyosis are vague it is undiagnosed unless hysterectomy specimens undergo histopathology tests. The prevalence of adenomyosis vary widely from 5 % to 70% ^{5,6} which is probably related to inconsistencies in the histopathologic criteria for diagnosis. On the contrary leiomyomas have a high prevalence upto 70% in Caucasians and 80% in women of African ancestry^{5,7}.

Conclusion: In our study, adenomyosis was found to be the most common histopathological finding followed by fibroid. Clinical and pathological evaluation correlated well to diagnose leiomyoma but were not of much help to diagnose adenomyosis. Adenomyosis still remains a clinical challenge and so has to be kept in mind by the clinician as well as pathologist in women with abnormal uterine bleeding. AUB in perimenopausal age is alarming and needs

thorough evaluation since this could be a considerable clinical significance , because of its relationship with hyperplasias and malignancies of the endometrium.

References:

- Rizvi G, Pandey H, Pant H, Chufal SS, Pant P. Histopathological correlation of adenomyosis and leiomyoma in hysterectomy specimens as the cause of abnormal uterine bleeding in women in different age groups in the Kumaon region: A retrospective study. J Midlife Health 2013;4:27-30.
- Baral R, Sherpa P, Gautam D. Histopathological analysis of hysterectomy specimens: one year study J of Pathology of Nepal (2017) Vol 7 , 1084 – 1086.
- Domblae V, Gundalli S. International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064.
- Michail G, Karahaliou A, Skiadopoulos S, Kalogeropoulou C, Terzis G, Boniatis I et al.; Texture analysis of perimenopausal & postmenopausal endometrial tissue in grayscale transvaginal ultrasonography. British J Radiol., 2007; 80(956): 609-616.
- Munro MG, Critchley HO, Broder MS, Fraser IS; FIGO classification system (PALM-COEIN) for causes of abnormal uterine bleeding in nongravid women of reproductive age. FIGO Working Group on Menstrual Disorders. Int J Gynaecol Obstet., 2011; 113: 3–13.
- Dueholm M. Transvaginal ultrasound for diagnosis of adenomyosis : A review. Best Pract Res Clin Obstet Gynaecol 2006;20:569-82.
- Day Baird D, Dunson DB, Hill MC, Cousins D, Schectman JM. High cumulative incidence of uterine leiomyoma in black and white women: Ultrasound evidence. Am J Obstet Gynecol 2003;188:100-7.

Conflict of interest: None
Funding: None
Cite this Article as: Mittal A, Sharma S. Histopathological Analysis Of Hysterectomy Specimens In Women Of Different Age Groups. Natl J Integr Res Med 2020; Vol.11(1): 26-27