

TO STUDY THE CORRELATION BETWEEN CLINICAL EVALUATION AND HISTOPATHOLOGICAL FINDINGS IN ABNORMAL UTERINE BLEEDING

Dr. Archana Ramole¹ (Demonstrator) & Dr. Tanya Agrawal Chaurasia² (Asst. Prof.)

¹Demonstrator, Department of Pathology, Gandhi Medical College, Bhopal

²Assistant Professor, Department of OBG, Index Medical College Hospital & Research Centre, Indore

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Corresponding author: Dr. Tanya Agrawal Chaurasia

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Abstract

Background & Method: The present study was conducted after approval from institutional ethical committee in the Department of Pathology, Gandhi Medical College, Bhopal, M.P. The study design was cross sectional observational and included Prospective study from Apr 2017 to March 2019.

Result: Adenomyosis was seen in 29.7% of cases. Dual pathology of adenomyosis and leiomyoma was seen in 10.3% cases, adenomyosis with endometrial polyp was seen in 1.3% of cases, adenomyosis with endocervical polyp was seen in 0.7% cases, and 0.3% cases each of atrophic uterus, bicornuate uterus and neurofibroma with adenomyosis was seen.

Conclusion: The preoperative diagnosis correlates well with the final histopathological diagnosis. However, there are considerable numbers of incidental findings, which are diagnosed only on histopathological evaluation.

Keywords: Clinical, Histopathological & Uterine Bleeding.

Study Designed: Prospective Observational Study.

Introduction

Abnormal uterine bleeding is considered as one of the most common and challenging problem presenting to the gynecologist[1]. Abnormal uterine bleeding is defined as any bleeding that corresponds with the frequency, duration or amount of blood flow of normal menstrual cycle and could be a sign of simple hormonal imbalance or a serious underlying condition necessitating aggressive treatment including a major surgical procedure[2].

Under normal circumstances, a woman's uterus sheds a limited amount of blood during each menstrual period (less than 5 tablespoons or 80 mL). Bleeding that occurs between menstrual periods or excessive menstrual bleeding is considered to be abnormal uterine bleeding. Once a woman who is not taking hormone therapy enters menopause and the menstrual cycles have ended, any uterine bleeding is considered abnormal[3&4].

Material & Method

The present study was conducted after approval from institutional ethical committee in the Department of Pathology, Gandhi Medical College, Bhopal, M.P. The study design was cross sectional observational and included Prospective study from October 2015 to July 2017.

CASE SELECTION:

All information related to patient was noted i.e. Name, Age, Registration number, complaints, investigations, Size,

shape and weight of the uterus, Surface of the uterus, Thickness of the endometrium and myometrium, Length of fallopian tube and cervix, Measurements of ovary.

In prospective study, specimens received were fixed in 10% formal saline for 24 hours and processed in the tissue processing machine (Histokinette).

Paraffin embedded tissue were then blocked in paraffin wax with the help of Plastic moulds. Sections of 3-4 microns were cut on a rotary microtome. Short Ribbons of the sections were floated out in a water bath. Then they were picked up on micro-slides already coated with albumin-glycerine adhesive and kept on hot plate at 60°C temperature for 45 minutes.

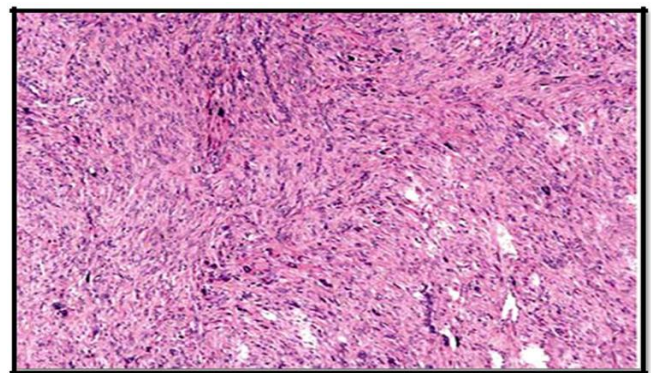


Figure 1: Atypical leiomyoma showing bizarre spindle shaped cells arranged in different planes having multinucleated densely hyperchromatic nuclei with no mitotic activity (H&E 100x).

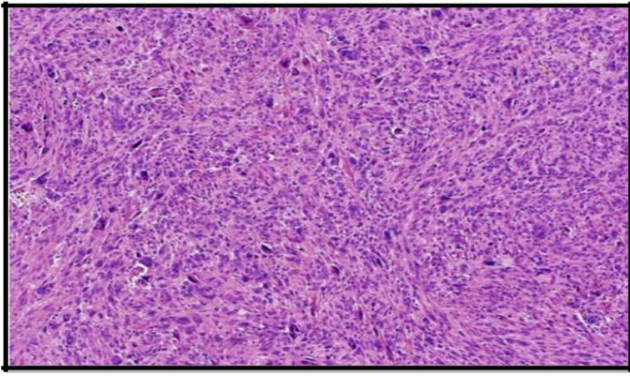


Figure 2: Leiomyosarcoma showing moderate pleomorphism, vesicular nuclei and scant to clear cytoplasm with increased mitotic activity (H&E 100x).

Table 1: Distribution of AUB cases as per histopathology diagnosis of adenomyosis along with associated Pathology

Histopathology Finding	No.	Percent (%)
Adenomyosis	89	29.7
Adenomyosis, Atrophic Uterus	1	0.3
Adenomyosis, Bicornuate Uterus	1	0.3
Adenomyosis, Endocervical Polyp	2	0.7
Adenomyosis, Endometrial Polyp	4	1.3
Adenomyosis, Leiomyoma	31	10.3
Adenomyosis, Neurofibroma	1	0.3

Adenomyosis was seen in 29.7% of cases. Dual pathology of adenomyosis and leiomyoma was seen in 10.3% cases, adenomyosis with endometrial polyp was seen in 1.3% of cases, adenomyosis with endocervical polyp was seen in 0.7% cases, and 0.3% cases each of atrophic uterus, bicornuate uterus and neurofibroma with adenomyosis was seen.

Table 2: Distribution of AUB cases as per histopathology diagnosis of leiomyoma along with associated Pathology

Histopathology Finding	No.	Percent (%)
Leiomyoma	74	25
Leiomyoma, Atrophic Uterus	1	0.3
Leiomyoma, Endocervical Polyp	2	0.7
Leiomyoma, Endometrial Polyp	4	1.3

Leiomyoma was seen in 25.0% of cases. Leiomyoma with endometrial polyp was seen in 1.3% of cases. Leiomyoma with endocervical polyp was seen in 0.7% cases and 0.3% cases were seen of leiomyoma with atrophic uterus.

Discussion

Present study is in concordance with study of Chaturvedi M et al[5] and Revathy S et al[6]. Whereas, the study of Siddegowda MS et al[6] found lower incidence of endometrial polyp as compared to present study. This

difference could be because of the variation in patient selection. The occurrence of endometrial polyps in our study was seen in 3.9% cases, which was the most commonly seen organic lesion in perimenopausal and postmenopausal age group. In the younger age, the incidence of endometrial polyp is low; it may be attributed to a possibility of spontaneous regression mechanism, which is characteristic of cyclical endometrium in reproductive age group[7]. Non-random chromosomal aberrations and monoclonality suggests that polyp make up a microenvironment for the development of malignancy[8].

In the present study, correlation of the pre-operative clinical diagnosis with the final histopathological examination of the hysterectomy specimens was done. AUB in premenopausal women mostly results from benign lesions that include adenomyosis and leiomyoma. Total number of cases studied was 300. Pre-malignant lesion was observed in heavy menstrual pattern. Whereas malignancy was seen in post-menopausal bleeding. The most common age group for presentation of AUB is 36 and 45 years. The endometrial pattern noted is proliferative phase (53%). The most common pattern of bleeding observed was Heavy menstrual bleeding (29.3%) and the histopathological finding noted was adenomyosis (29.7%).

Conclusion

The preoperative diagnosis correlates well with the final histopathological diagnosis. However, there are considerable numbers of incidental findings, which are diagnosed only on histopathological evaluation. 8. The most common histopathological finding was adenomyosis (29.7%) followed by leiomyoma (25%), chronic cervicitis (24.7%), dual pathology(10.3%) of adenomyosis and leiomyoma, endometrial polyp(3.9%), atrophic uterus (2.3%), adenocarcinoma of endometrium (0.7%) and leiomyosarcoma(0.3%).

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