



## Endometrial Pathologies in Patients of Abnormal Uterine Bleeding (AUB)

Authors

**Dr Rupam Sinha<sup>1</sup>, Dr Ruchi Prasad<sup>2</sup>, Dr Pinky Priya<sup>3</sup>**

<sup>1</sup>Associate Professor, Department of Obst. & Gynae, Patna Medical College, Patna

<sup>2</sup>Senior Resident, Department of Obst. & Gynae, Patna Medical College, Patna

<sup>3</sup>PG Student, Department of Obst. & Gynae, Patna Medical College, Patna

### Abstract

**Introduction:** *One of the commonest presenting symptom in gynecology OPD is abnormal uterine bleeding. It has remained one of the most frequent indication for hysterectomy in developing countries. Endometrial sampling is effectively use as the first diagnostic step in AUB. This study was done to evaluate the histopathology of endometrium for identifying the endometrial causes of AUB.*

**Material and Methods:** *It was a study done at the Obst. & Gynae department of Nalanda Medical College & Patna Medical College Patna, Bihar on about 250 patients who presented with AUB during the period July 2016 to June 2018 out of there 160 cases were studied. There were patients with isolated endometrial lesions diagnosed on histopathology.*

**Results:** *The commonest histopathological spectrum was normal menstrual pattern (33.7%) and the commonest pathology irrespective of age group was disordered proliferative pattern (20%) other pathologies seen were benign endometrial polyp (11.2%) chronic endometritis (10%), atrophic endometrium (5%), endometrial hyperplasia (4.4%), and endometrial carcinoma (1.8%). Complication of pregnancy (13.8%) was an important pathology, which is often missed due to irregular bleeding pattern. Going by the age, the most common age of presentation was 40-50 years.*

**Conclusion:** *Frequency of benign endometrial pathology is quite high in AUB (98%). Age was associated with more progressive lesions found in peri and postmenopausal women, such as endometrial hyperplasia and endometrial carcinoma.*

**Keywords:** *Endometrial pathology, Abnormal uterine bleeding, Endometrial biopsy.*

### Introduction

Menstrual problems account for much of morbidity, affecting one in every five women during their life span. Prevalence of AUB in Bihar was found to be about 5-15%. Risk Factor of AUB include female genital tract pathologies, pregnancy related disorders, and systemic illnesses. Endometrial biopsy is a safe and effective diagnostic step in evaluation of AUB after ruling out medical causes. This study was

done to identify the endometrial causes of AUB and to determine the specific pathology in different age groups.

### Materials and Methods

It was a prospective cross-sectional study conducted at Nalanda Medical College and Patna Medical College Hospital, Patna, from July 2016 to June 2018. Ethical Committee of PMCH and NMCH approved the study. Since they are both

tertiary care hospitals, most cases come after some treatment elsewhere. Women underwent pipelle aspiration endometrial sampling and standard operating procedures were followed for obtaining the histopathological samples. Inclusion criteria were isolated endometrial causes of AUB and those with leiomyoma, cervical, vaginal pathology and hemostatic disorder were excluded. All specimens were transported in 10% formalin to the pathology department of NMCH and PMCH. Age duration of Abnormal Bleeding and observed histopathological spectrum, were recorded on performa. Informed consent was taken prior to the procedure. Cases were stratified into reproductive (approx 12 to 39 years), perimenopausal (40-50 years) and post menopausal (50 years onward) age groups. As told by pathology department microscopic examination was done by two pathologist individually, to reduce observer bias.

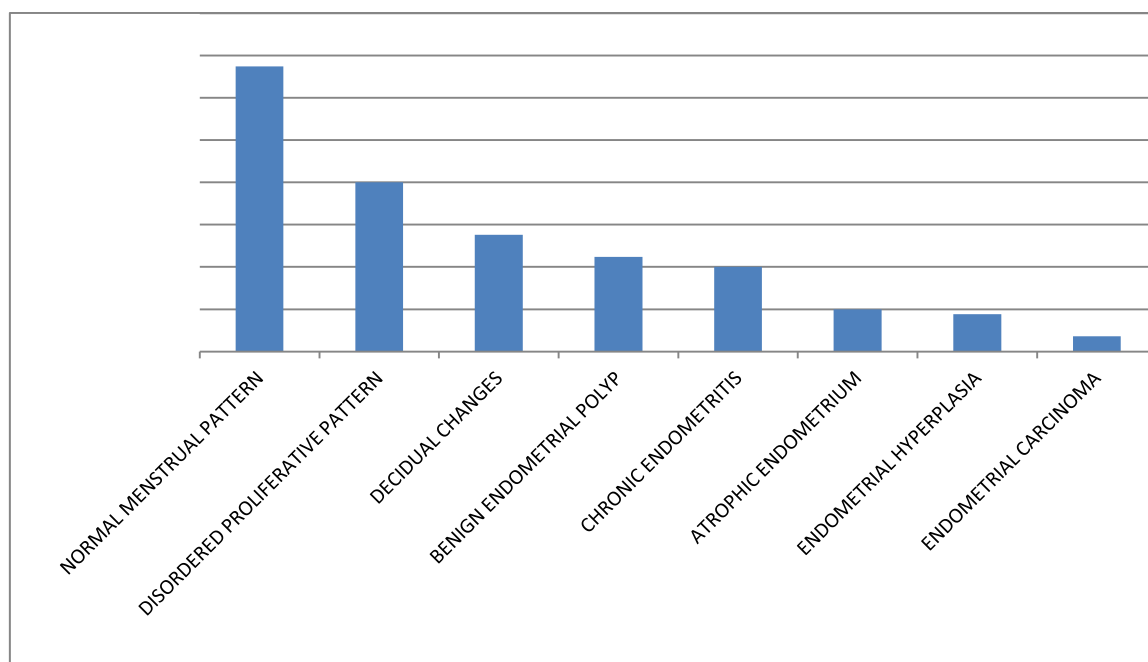
The data collected was statistically analyzed along y2 test.

**Results**

Within the study period there were 250 AUB cases out of which only 160 patients were recruited into the study. Patients’ mean age was 40.2 years ±11.4 (18 - 25 years). Age wise distribution was as in Table 1.

AGE	GROUP	NUMBER	PERCENTAGE
12-39 year	Reproductive	79/160	49.3%
40-50 year	Premenopausal	51/160	31.8%
>50 year	Post Menopausal	30/160	18.9%

48 participants (30%) presented with poly menorrhea which was the most common pattern, followed by irregular bleeding (25%). Remaining patterns included intermenstrual spotting, menorrhagia and post menopausal bleeding. Major histological pattern observed were as illustrated in figure I



Thus endometrial pathologies were observed in around 66% participants where as normal menstrual pattern was seen in 34% cases of AUB. Going by stratification of age incidence, hormonal imbalance pattern (disordered proliferative) was common in reproductive and perimenopausal age group, followed by benign endometrial polyps, and chronic endometritis. Pregnancy complication

with decidual changes was seen in the reproductive age group. In the postmenopausal age group, benign endometrial polyps were the most frequent pathology (35.5%) followed by atrophic endometrium (33.3%). On the other hand, the frequency of endometrial hyperplasia and carcinoma was quite low (13.2% and 9% respectively)

Thus in all 160 participants, 157 (98%) had benign histopathological spectrum where as malignancy was observed in 3 participant (1.9%)

### Discussion

AUB is excessive, erratic or irregular bleeding pervaginally usually associated either with hormonal imbalance or intrauterine pathology. It has been estimated that around 6% women aged 25-44 years consult gynaecologist for excessive menstrual loss every year. One of major cause of excessive or erratic menstruation is the inadvertent use to contraceptive modalities. AUB is of concern because it may have serious medical and social consequences, as bleeding may cause anemia, undue disruption of women's daily activities and sexual life. It is important to evaluate the endometrial pathology in women who has no improvement following a course of medical therapy for atleast three months. Cause of AUB may vary from one region to another. The lower incidence of endometrial carcinoma in our region can be associated with early child bearing and multiparity. The sensitivity of endometrial biopsy for detection of endometrial abnormalities has been reported to be as high as 96%. The result of our study match those of other national studies done at various tertiary centers in the country.

### Conclusion

Endometrial cause of AUB is an age related pathology. Histopathological examination of endometrial sample is major diagnostic tool in evaluation of AUB and specific diagnosis could help plan therapy for successful management of AUB.

### References

1. Harlow SD, Campbell OMR: Epidemiology of menstrual disorders in developing countries: a systematic review. BJOG. 2004.
2. Munro MG, Critehley HO, Broder MS, Fraser IS: FIGO Working Group on Menstrual Disorder. Int J Gynaecol Obstet. 2011,.
3. Heavy Menstrual Bleeding,. NICE Clinical Guidelines, No.44.
4. Brenner PF. Differential diagnosis of AUB .Am J. obst.& gynae 1996,175 P 766-9
5. Kilborn CL, Richards CS. Abnormal Uterine Bleeding Diagnostic Consideration Management Option. Post Grade Med.2001,109,137-50
6. Dugal GA study of endometrium of patients with abnormal uterine bleeding at Chitwan Valley Kathmandu university Med. J,2003 1:110-12
7. Azim P, Mumtaz MK, Shrif N, Khattak E: Evaluation of abnormal uterine bleeding on endometrial biopsies. ISRA Med J. 2011, 3:84.