



## STUDY OF ENDOMETRIAL PATHOLOGY IN ABNORMAL UTERINE BLEEDING

\*Shajitha S., Sangeerani M and Mallika A

Department of Obstetrics and Gynaecology, Rajah Muthiah Medical College and Hospital, Annamalai University, Chidambaram, Tamil Nadu, India-608 002

## ARTICLE INFO

**Article History:**

Received 8th July, 2017  
 Received in revised form 15th  
 August, 2017  
 Accepted 27th September, 2017  
 Published online 28th October, 2017

**Key words:**

Abnormal uterine bleeding, histopathology,  
 perimenopausal,

## ABSTRACT

**Background:** Abnormal uterine bleeding is one of the commonest complaints in women and when it occurs without organic lesions like tumor, inflammation, it is called as dysfunctional uterine bleeding. Aim of current study was to find out the histopathological pattern of endometrium in Abnormal Uterine Bleeding (AUB).

**Methods:** A prospective study of 50 perimenopausal women with complaint of AUB with age group ranging from 40-51years, those attending to the department of gynecology at Rajah Muthiah Medical College and Hospital from 2015-2017. Clinical examination between parameters were analyzed. All the patients were subjected to dilatation of curettage and endometrial samples were subjected to histopathology examination.

**Results:** Out of 50 women, 62% belonged to the age group 40-45 years and 66% patients presented with menstrual complaints of menorrhagia which accounts for the common menstrual complaint. Most common type of endometrial pattern is proliferative endometrium, which accounts of about 60%.

**Conclusion:**

1. In perimenopausal women AUB is most commonly dysfunctional in origin.
2. This study helps us to individualize treatment protocols between medical and surgical intervention.

**Copyright © Shajitha S. et al 2017**, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

## INTRODUCTION

Perimenopause is the phase, preceding the onset of menopause, generally occurring around 40 years of age during which the regular menstrual cycle of a woman changes from normal adulatory cycles to a pattern of irregular cycles<sup>1,2</sup>

The terminology of abnormal uterine bleeding includes the following clinical entities<sup>2,3,4</sup> Oligomenorrhea, Polymenorrhea, Menorrhagia, Menometrorrhagia, Metrorrhagia, Midcycle spotting, and dysfunctional uterine bleeding.

Endometrial biopsy or curettage could be a safe and effective diagnostic step in evaluation of abnormal uterine bleeding after ruling out medical causes.

## MATERIAL AND METHODS

This is a prospective study done on 50 perimenopausal women with a complaint of AUB in the age group ranging from 40 - 51years those who are attending the OPD at Rajah Muthiah Medical College and Hospital, Chidambaram

All the patients were included in the study after taking prior informed consent.

**Inclusion Criteria**

1. Women of more than 39yrs age, before menopause (between 39yrs to before menopause) with menstrual irregularities.
2. With no detectable pelvic pathology.

\*Corresponding author: Shajitha S

Department of Obstetrics and Gynaecology, Rajah Muthiah Medical College and Hospital, Annamalai University, Chidambaram, Tamil Nadu, India-608 002

**Exclusion Criteria**

1. Patient with abnormal uterine bleeding in other age group.
2. Carcinoma of genital track.
3. Active genital tract infection.
4. Severe medical condition precluding study like uncontrolled hypertension DM.
5. Pregnancy with related cause of bleeding PV.

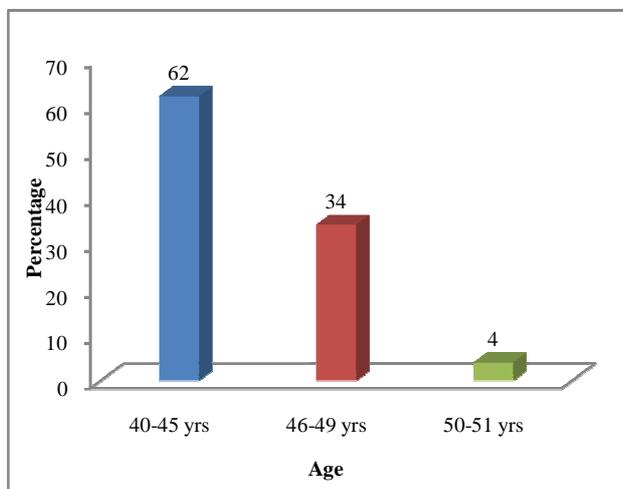
They were examined with detailed clinical history, general examination, pelvic examination, basic lab investigations & transvaginal sonogram done for endometrial pathology including the thickness of the endometrium & then admitted in the gynaec ward. Later they were subjected to fractional curettage in the premenstrual phase. Endometrial biopsy sent for histopathological study.

**RESULTS**

**Table 1 Age Distribution**

Age	No. of cases	Percentage
40-45 yrs	31	62.0
46-49 yrs	17	34.0
50-51 yrs	2	4.0
Total	50	100.0

50 cases in the age group of 40-51 years were included in the study. 62% of patients belong to the age group 40-45 years. 34% of patients correspond to age group 46-49 years.

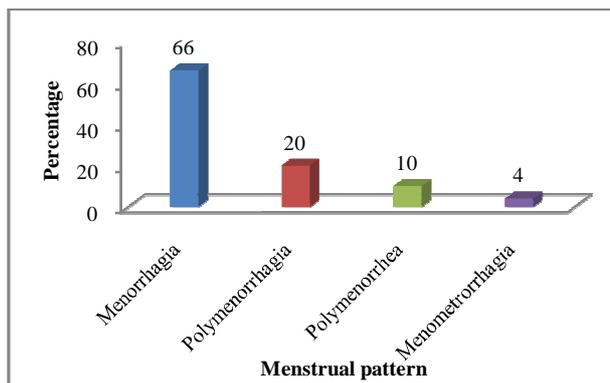


**Graph 1 Age Distribution**

**Table 2 Menstrual pattern**

Menstrual pattern	No. of cases	Percentage
Menorrhagia	33	66.0
Polymenorrhagia	10	20.0
Polymenorrhoea	5	10.0
Menometrorrhagia	2	4.0
Total	50	100.0

Majority 66% in perimenopausal presented

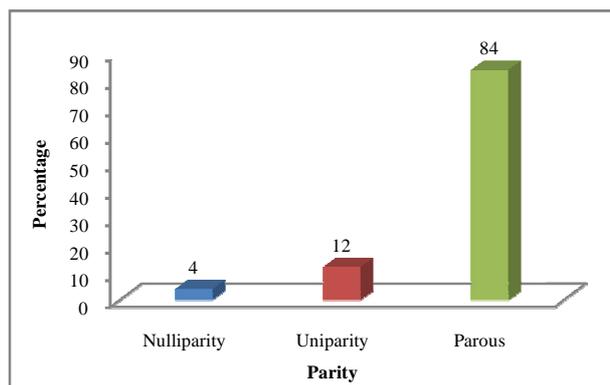


**Graph 2 Menstrual pattern**

**Table 3 Parity**

Parity	No. of cases	Percentage
Nulliparity	2	4.0
Uniparity	6	12.0
Parous	42	84.0
Total	50	100.0

Majority 84 % of perimenopausal women were multiparous.

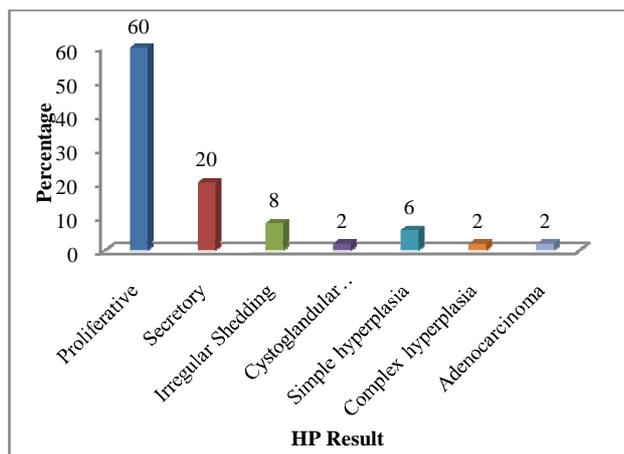


**Graph 3 Parity**

**Table 7 Histopathology of Endometrium**

HP Result	No. of cases	Percentage
Proliferative	30	60
Secretory	10	20
Irregular Shedding	4	8.0
Cystoglandular hyperplasia	1	2.0
Simple hyperplasia	3	6.0
Complex hyperplasia	1	2.0
Adenocarcinoma	1	2.0
Total	50	100

Most common type of endometrial pattern is proliferative endometrium. Out of 50 perimenopausal women, 60% had proliferative type of endometrium, 20% women had secretory pattern 8% had irregular shedding 1% cystoglandular hyperplasia, 3% had simple hyperplasia, 1% women had adenocarcinoma.



**Graph 7** Histopathology of Endometrium

## DISCUSSION

Abnormal uterine bleeding is common in perimenopausal women. The etiology varies from simple dysfunctional uterine bleeding to benign lesion like polyp & malignancies. Apart from the clinical examination, various diagnostic modalities are available to confirm our diagnosis. Current study designed to identify the cause of AUB in perimenopausal women and also to correlate with their histopathology examination.

Totally of 50 cases in perimenopausal age group was enrolled in the study. Majority 31 cases (62%) are between 40 - 45 yrs of cases (34%) are B/W 46-49 yrs and 2 cases (4%) are above 49. This study is closely related to archana bhosle, cornitese, Shoba S.Pillai *et al.* Archana Bhosle<sup>1</sup> studied 112 perimenopausal women with abnormal uterine bleeding, where 76% were in the age group of 41-45, 2.6% were in group 46-50 and 2.6% in group >51. Shoba S.Pillai *et al* study report showed 40% were in the age group of 48 to 51 years.

Cornitesc studied<sup>5</sup> 256 perimenopausal patients and reported 35.5% incidence in age 41-45 and 64.5% incidence in group 46-52. In our study, majority of women in perimenopausal age group 42 cases were multiparaious, 6 cases (12%) were unipara, 2 cases (4%) were of nulliparity which closely related to Prasanna Byna, Shireesha Siddular *et al* (2015).<sup>7</sup> The study report showed out of 65 perimenopausal women 11 (16.9%) were primipara, 36 (55-38) were para, 18 (27-69%) were para 3+ above.

In our study most common presentation in perimenopausal age group was menorrhagia i.e. 33 cases (66%). Remaining patients in perimenopausal age group presented with polymenorrhagia 10 cases (20%), 2 cases (4%) with menometrorrhagia.

This finding was comparable with the study of Shobha S. Pillai *et al*<sup>6</sup> (2014), in which clinical presentation as menorrhagia in AUB evaluation revealed 46.5% respectively. In our study majority 30 cases (60%) showed proliferative endometrium and 10(20%) of cases showed secretory endometrium, in comparison to study.

According to Bhosle,<sup>1</sup> 66.1% had proliferative endometrium, 16.1% had Secretory endometrium and 17.8 % simple hyperplasia without atypia, In our study majority 30 cases (60%) showed proliferative endometrium and 10(20%) of cases showed secretory endometrium, in comparison to study.

Predominant number of cases in this study showed normal physiologic phases such as proliferative, secretory and atrophic menstrual pattern. The bleeding in the proliferative phase may be due to anovulatory cycles and bleeding in the secretory phase is due to ovulatory dysfunctional uterine bleeding.

## CONCLUSION

Histopathological examination is mandatory in all cases of AUB in perimenopausal age. 66.14% had benign pathology which can be managed by hormonal therapy or conservative surgical modalities which alleviates need for unnecessary hysterectomy.

Endometrial cause of AUB is age related pathology. Histopathological examination of endometrial biopsy is a major diagnostic tool in evaluation of AUB and a specific diagnosis could help the physician to plan therapy for successful management of AUB.

## References

1. Bhosle A, Fonseca M. Evaluation and histopathological correlation Of abnormal uterine bleeding in perimenopausal women. *Bombay Hospital J.*2010; 52(1):69-72.
2. Fritz MA, Speroff L. Clinical gynaecologic endocrinology, and infertility. 8th ed. Lippincott Williams & Wilkins; 2011.
3. Goodman A. Abnormal genital tract bleeding. *Clin Cornerstone.* 2000; 3(1):25-35.
4. Oriel KA, Schrager S. Abnormal uterine bleeding. *Am Fam Physician.* 1999; 60(5):1371-82.
5. Cornitescu Fl, Tanase F, Simionescu C, Illiescu D. Clinical, histopathological and therapeutic considerations in non-neoplastic abnormal uterine bleeding in menopause transition. *Rom J Morphol Embryol.*2011; 52(3):759-65.
6. Shobha S. Pillai *et al* (2014). Sonographic and Histopathological Correlation and evaluation of endometrium in perimenopausal women with abnormal uterine bleeding. *Int. J. Repord Contracept Obstcyn.*113-117.
7. Prasanna Byna, Shireesh Siddula, Swathi Kolli, Mahaboob V. Shaik, (2015) hisopathological correlation of abnormal uterine bleeding in perimenopausal women, *Int. J. Reppro. Cog.* 4(6):1875-1878.16.

\*\*\*\*\*