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A Retrospective Study of Abnormal Uterine Bleeding and Its Endometrial Histopathological Correlation in A Tertiary Care Hospital

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Abstract

Background: Abnormal uterine bleeding (AUB) is a common gynaecological problem and may result from structural or non-structural causes. Endometrial histopathological examination remains an important component of evaluation, particularly in women at increased risk of endometrial pathology.

Aim: To analyse the histopathological patterns of endometrium among women presenting with AUB in a tertiary care hospital.

Methods: A retrospective observational study was conducted at A.J. Institute of Medical Sciences, Mangaluru, Karnataka. Women aged >35 years presenting with AUB who underwent dilatation and curettage during the six-month study period from March 2023 to September 2023 were included using universal sampling. Women receiving hormonal therapy were excluded. Histopathological findings were categorized into non-organic and organic endometrial causes. Data were analysed using SPSS version 20 and expressed as proportions and percentages.

Results: Eighty women were included. The age range was 35–60 years, with the largest proportion aged 35–40 years (37.5%). Menorrhagia was the commonest clinical presentation (60%), followed by polymenorrhagia and postmenopausal bleeding (12.5% each). Non-organic endometrial patterns accounted for 75% of cases, while organic pathology accounted for 25%. Secretory

endometrium was the commonest non-organic pattern (37.5%). Among organic lesions, endometrial hyperplasia without atypia and endometrial polyps were the most frequent categories (35% each). Endometrial carcinoma constituted 10% of organic lesions.

Conclusion: Most women with AUB in this study had benign/non-organic endometrial histopathology. Endometrial assessment remains valuable for identifying hyperplasia and malignant pathology and may support appropriate management while avoiding unnecessary definitive surgery.

Keywords: Abnormal Uterine Bleeding, Endometrial Histopathology, Dilatation and Curettage, Endometrial Hyperplasia, Endometrial Polyp, Endometrial Carcinoma

Introduction

Abnormal uterine bleeding is defined by abnormalities in the frequency, duration, amount and/or regularity of uterine bleeding. Chronic non-gestational AUB refers to abnormal bleeding from the uterine corpus that has persisted for most of the preceding six months.[14] AUB is common among women of reproductive age, with reported prevalence varying between approximately 3% and 30%.[14] The causes of AUB include both structural and non-structural disorders and are systematically classified using the FIGO PALM-COEIN system.[4]

Endometrial assessment is an important part of the evaluation of selected women with AUB, especially in older age groups and when symptoms persist despite medical therapy. Histopathology can identify benign patterns as well as premalignant and malignant endometrial lesions.[235] Dilatation and curettage (D&C) has traditionally been used as a diagnostic procedure in the evaluation of AUB, although current practice increasingly incorporates office-based endometrial sampling and hysteroscopic assessment where appropriate.[23]

The present study was undertaken to evaluate the spectrum of endometrial histopathological findings among women aged more than 35 years presenting with AUB in a tertiary care teaching hospital.

Aim

To analyse the different histopathological patterns of the endometrium in women presenting with abnormal uterine bleeding in a tertiary care hospital.

Materials and Methods

Study design and setting: This was a retrospective observational study conducted in the Department of Obstetrics and Gynaecology at A.J. Institute of Medical Sciences, Mangaluru, Karnataka, India.

Study period and participants: All women presenting with AUB during the six-month period from March 2023 to September 2023 were screened. Women aged more than 35 years who presented with AUB and underwent D&C were included.

Sampling: Universal sampling was adopted, and all eligible patients during the study period were included.

Inclusion criteria: Women aged >35 years presenting with AUB who underwent D&C during the study period.

Exclusion criteria: Women receiving hormonal therapy.

Histopathological classification: Histopathological findings were grouped into non-organic and organic endometrial causes. Non-organic patterns included proliferative, secretory, disordered proliferative and atrophic endometrium. Organic pathology included endometrial polyp, endometrial hyperplasia without atypia, endometrial hyperplasia with atypia, tubercular endometritis and carcinoma endometrium, as represented in the study dataset.

Statistical analysis: Data were analysed using Statistical Package for the Social Sciences (SPSS), version 20. Categorical variables were presented as frequencies, proportions and percentages.

Results

A total of 80 women fulfilled the eligibility criteria and were included in the analysis. The participants were aged 35–60 years. The largest age group was 35–40 years, comprising 30 of 80 women (37.5%). Women aged >55 years constituted 3 of 80 cases (3.75%).

Clinical presentation	n	Percentage
Menorrhagia	48	60.0
Polymenorrhagia	10	12.5
Postmenopausal bleeding	10	12.5
Polymenorrhoea	7	8.75
Oligomenorrhoea	5	6.25

Table 1: Distribution of clinical presentations among women with AUB.

Menorrhagia was the most frequent presenting complaint, occurring in 48 of 80 women (60%). Polymenorrhagia and postmenopausal bleeding were each reported in 12.5% of cases, followed by polymenorrhoea (8.75%) and oligomenorrhoea (6.25%).

Histopathological category	n	Percentage
Non-organic causes	60	75.0
Organic causes	20	25.0
Total	80	100.0

Table 2: Distribution of non-organic and organic endometrial pathology.

Non-organic endometrial pathology was identified in 60 women (75%), whereas 20 women (25%) had organic pathology.

Non-organic histopathology	n	Percentage
Proliferative endometrium	20	25.0
Secretory endometrium	30	37.5
Atrophic endometrium	4	5.0
Disordered proliferative endometrium	5	6.25

Table 3: Distribution of non-organic histopathological patterns.

Among the non-organic patterns, secretory endometrium was the commonest finding, accounting for 30 of 80 women (37.5%), followed by proliferative endometrium (25%). Atrophic and disordered proliferative patterns accounted for 5% and 6.25%, respectively.

Organic histopathology	n	Percentage of organic lesions
Endometrial hyperplasia without atypia	7	35.0
Endometrial hyperplasia with atypia	5	25.0
Endometrial polyp	7	35.0
Carcinoma endometrium	2	10.0

Table 4: Distribution of organic histopathological lesions.

Among the 20 women with organic pathology, endometrial hyperplasia without atypia and endometrial polyp were the most frequent findings, each accounting for 7 cases (35%). Hyperplasia with atypia was identified in 5 cases (25%), while carcinoma endometrium was reported in 2 cases (10%).

Discussion

AUB is a common reason for gynaecological consultation and requires systematic evaluation using clinical assessment, imaging and, when indicated, endometrial sampling.[145] The present study evaluated 80 women aged more than 35 years with AUB who underwent D&C. The highest proportion belonged to the 35–40-year age group (37.5%), indicating that AUB requiring histopathological assessment was particularly frequent in the younger segment of the study population.

Menorrhagia was the most common clinical presentation, occurring in 60% of women. This finding is comparable to the study by Neha et al., in which menorrhagia was reported in 54% of 100 women evaluated for AUB.[2]

In the present study, 75% of cases demonstrated non-organic endometrial patterns and 25% had organic pathology. This distribution is broadly comparable with previously reported series in which benign/non-organic endometrial patterns constituted the majority of histopathological diagnoses.[126]

Secretory endometrium was the most common non-organic pattern (37.5%). Among organic lesions, endometrial polyp and hyperplasia without atypia each accounted for 35%. Importantly, carcinoma endometrium was identified in 2 women, representing 10% of the organic lesions. These findings highlight the value of endometrial histopathology in selected women with AUB, particularly when there is concern for hyperplasia or malignancy.[35]

The findings should be interpreted in the context of the retrospective design, single-centre setting, relatively small sample size and restriction to women undergoing D&C. The study did not evaluate ultrasound endometrial thickness, risk factors, comorbidities or treatment outcomes; therefore, associations between these variables and histopathological diagnosis could not be established.

Conclusion

In this retrospective study of women aged more than 35 years presenting with AUB, menorrhagia was the predominant clinical presentation and non-organic endometrial patterns constituted the majority of histopathological findings. Secretory endometrium was the commonest non-organic pattern, while endometrial polyp and hyperplasia without atypia were the most frequent organic lesions. Carcinoma was identified in a subset of women with organic pathology. Endometrial histopathological assessment remains an important diagnostic tool in appropriately selected patients with AUB for detection of hyperplasia and malignancy and for guiding further management.

Limitations

Retrospective design with reliance on available medical records.

Single-centre study with a relatively small sample size of 80 women.

Only women aged >35 years who underwent D&C were included, limiting generalisability.

Potential clinical and sonographic predictors of histopathology were not analysed.

Treatment outcomes and long-term follow-up were not assessed.

References

1. Varun N, Gupta N, Khan S. A retrospective study of endometrial histopathology in abnormal uterine bleeding patients. Int J Reprod Contracept Obstet Gynecol. 2018;7:4116-4119.
2. Shinde PT, Sarate DS, Patil SB, Patil BV, Kangate SV. Study of histopathological pattern of endometrium in abnormal uterine bleeding in a

tertiary care center. Int J Res Med Sci. 2023;11(4):1170-1174. doi:10.18203/2320-6012.ijrms20230856.

3. Royal College of Obstetricians and Gynaecologists. Management of Endometrial Hyperplasia. Green-top Guideline No. 67.
4. Munro MG, Critchley HOD, Broder MS, Fraser IS; FIGO Working Group on Menstrual Disorders. The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. Int J Gynaecol Obstet. 2018;143:393-408.
5. National Institute for Health and Care Excellence. Heavy menstrual bleeding: assessment and management. NICE guideline.
6. American College of Obstetricians and Gynecologists. Committee Opinion No. 557: Management of acute abnormal uterine bleeding in nonpregnant reproductive-aged women. Obstet Gynecol. 2013;121(4):891-896.