INTRODUCTION

Abnormal uterine bleeding (AUB) is defined as any deviation in terms of cycle, duration of bleeding, amount of bleeding, or combination of all.

AUB is the most common complaint that reproductive-age women bring to their gynaecologist. Dysfunctional uterine bleeding is defined as abnormal bleeding from the uterus, unassociated with other structural and functional causes. It can occur any time between menarche and menopause, in anovulatory and ovulatory cycles.

Management of AUB is not complete without tissue diagnosis, especially in perimenopausal and postmenopausal women.

Patients with a history of anovulation, obesity, hypertension, diabetes, and exogenous oestrogen use are at increased risk for hyperplasia and adenocarcinoma.\(^1\)

Adenocarcinoma of endometrium is often preceded by endometrial hyperplasia.\(^2\) Hence, early accurate diagnosis and proper treatment of endometrial hyperplasia are essential to prevent endometrial carcinoma.

MATERIALS AND METHODS

This study is done on women with a complaint of AUB in any age group attending the gynaecology OPD at MGMGH attached to KAPV Medical College during the period of November 2017–October 2018.
Inclusion criteria
Women with AUB feature in all age groups attending gynaecology OPD were included in the study.

Exclusion criteria
The following criteria were excluded from the study:
1. AUB due to gestational causes such as abortions, tubal pregnancies, and molar pregnancies.
2. Hormone therapy within the past 6 months.

The following data were collected:
1. Different types of histopathological findings in endometrial biopsy
2. Age group wise occurrence of AUB
3. Various causes of AUB
4. Parity and age-related occurrence of endometrial carcinoma.

Methods
Endometrial samples were obtained by biopsy, dilatation and curettage, fractional curettage, and pipelle sampling done at OP department and operative theatre.

RESULTS
Normal cyclical endometrium was found to be the most common pattern in the histopathological examination of presenting cases with proliferative endometrium in 56% (227) and secretory endometrium in 33% (135). This was followed in frequency by atrophic endometrium 3.5% (14), endometrial adenocarcinoma 2.7% (11), endometrial hyperplasia 1.2% (5), cystoglandular hyperplasia 0.9% (4), inflammatory endometrium 0.7% (3), adenomatous polyp 0.5% (2), and disorderly proliferative endometrium 0.5% (2). Histopathological examination was extremely useful in differentiating the different types of endometrial patterns [Table 1 and Figure 2].

The age group of patients in this study ranged from 20 to 65 years. Maximum numbers of cases were in the age group of 41–50 years of 194 cases (48%). This was followed by 98 cases (24%) in 31–40 years group, 63 cases (15%) in 51–60 years age group, and 38 cases (9.4%) in 21–30 years age group, and 10 cases (2.4%) in >60 years age group. Age-wise distribution of cases is clearly shown in Table 2 and Figure 3.

Most of the patients were multipara 80% (323), followed by primipara 10% (40), nullipara 3.5% (14), and grand multipara 6.5% (26). Parity-wise distribution is shown in Table 3.

In this study, dysfunctional uterine bleeding 61% (244) was found to be the most common cause of AUB, and this was followed by fibroid 24% (95), postmenopausal bleeding (PMB) 9.7% (39), carcinoma endometrium 3.2% (13), pelvic inflammatory disease 2.2% (9), anovulatory bleeding 0.4% (2), and adenomyosis 0.2% (1). Distribution of patients based on the causes of AUB [Figure 1] is shown in Table 4 and Figure 4.

DISCUSSION
From the present study, it was found that carcinoma endometrium commonly occurred in the age group 51–60 years...
(6 cases), and also of the 13 endometrial carcinoma cases, 6 were found to be nulligravida. From the study, it is evident that AUB commonly occurred in the age group of 41–50 years that is the perimenopausal age group. In the perimenopausal age group, there is a depletion of antral follicle count in ovary leading to erratic folliculo genesis and frequent anovulation and consequent AUB.

Table 3: Distribution of cases based on parity

<table>
<thead>
<tr>
<th>Parity type</th>
<th>Number of cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multipara</td>
<td>323 (80)</td>
</tr>
<tr>
<td>Primipara</td>
<td>40 (10)</td>
</tr>
<tr>
<td>Nullipara</td>
<td>14 (3.5)</td>
</tr>
<tr>
<td>Grand multipara</td>
<td>26 (6.5)</td>
</tr>
<tr>
<td>Total</td>
<td>403 (100)</td>
</tr>
</tbody>
</table>

Table 4: Distribution of cases based on the causes of AUB

<table>
<thead>
<tr>
<th>Causes</th>
<th>Number of cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysfunctional uterine bleeding</td>
<td>244 (61)</td>
</tr>
<tr>
<td>Fibroid</td>
<td>95 (24)</td>
</tr>
<tr>
<td>PMB</td>
<td>39 (9.7)</td>
</tr>
<tr>
<td>Pelvic inflammatory disease</td>
<td>9 (2.2)</td>
</tr>
<tr>
<td>Carcinoma endometrium</td>
<td>13 (3.2)</td>
</tr>
<tr>
<td>Anovulatory bleeding</td>
<td>2 (0.4)</td>
</tr>
<tr>
<td>Adenomyosis</td>
<td>1 (0.2)</td>
</tr>
<tr>
<td>Total</td>
<td>403 (100)</td>
</tr>
</tbody>
</table>

AUB significantly affects the quality of life of otherwise healthy women with different symptoms such as menorrhagia, polymenorrhea, and intermenstrual bleeding. Endometrial sampling is a safe and easy procedure and is the most common modality for the diagnosis of endometrial pathologies. The most common age group presenting with AUB in this study was 41–50 years. Other studies made by Doraisami et al., Vaidya et al., Bolde et al., and Jairajpuri et al.[4-7] also found that 41–50 years were the most common age group presenting with AUB.

In our study, most of the patients were in multiparous group; other studies also reported a higher incidence of AUB with increase in parity.[8-10]

In the histopathological findings, proliferate and secretory phase endometrium was observed in 56% and 33% of the patients. Other studies also reported similar high incidence of normal cyclical endometrium.[8,11]

Disordered proliferative pattern lies at one end of the spectrum of proliferative lesions of the endometrium that includes carcinoma at the other end with intervening stages of hyperplasia. Endometrial hyperplasia is a precursor of PMB is bleeding occurring in a menopausal women at least 1 year after cessation of menstrual cycles.[3] In this study, PMB was found in 39 patients (9.7%). Of the PMB group, most of the histopathological finding was atrophic endometrium (14 patients).
endometrial cancer. It is more commonly seen during the perimenopausal period. Endometrial carcinoma can occur as a result of excess oestrogenic stimulation.

**CONCLUSION**

Excessive menstrual blood loss is a common reason for women to seek medical help and leads to large demands in health resources. Histopathological examination of endometrial biopsy is a major diagnostic tool in the evaluation of AUB, and a specific diagnosis could help the clinician to plan therapy for the successful management of AUB. Benign lesions or no significant pathology was seen in most patients which can be managed by hormonal therapy or conservative surgical modalities which alleviates the need for hysterectomy. Anovulatory bleeding was common, especially in premenopausal women. Malignancy, in particular, was common in patients over 40 years of age.

**REFERENCES**
