

ORIGINAL RESEARCH

Histopathological findings in patients with abnormal uterine bleeding

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ABSTRACT

Background: The present study was conducted for evaluating histopathological findings in patients with abnormal uterine bleeding. **Materials & methods:** A total of 100 cases were enrolled. Well preserved endometrial tissue from females with AUB were enrolled. Inadequate and autolyzed specimens of endometrium were excluded. Details of the study protocol was explained to the subjects. Complete History was taken. Information on regularity of the menstrual cycles was taken. Endometrial curettage samples was fixed in 10% formalin and histopathological slides were prepared and stained with hematoxylin and eosin stain. Slides were examined under microscope to confirm the cause of AUB. All the results were analysed by SPSS software. **Results:** Normal/hormonal histopathologic findings were seen in 36 percent of the patients while hyperplasia was seen in 6 percent of the patients. Polyps were seen in 22 percent of the patients (Endometrial polyp – 7 percent; Cervical polyp – 15 percent). Endometrial carcinoma was present in 6 percent of the patients while cervical carcinoma was seen in 5 percent of the patients. Collectively, malignancies were present in 11 percent of the patients. **Conclusion:** Normal cyclic changes account for the highest proportion of histopathological findings. However, malignancies are important causes of AUB.

Key words: Histopathological, Abnormal uterine bleeding

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INTRODUCTION

Menstruation usually begins at age 10 to 15. Young girls who have not menstruated before age 15 or who have vaginal bleeding before age 10 should be suspected of having gynecologic disease. Menarche usually appears 1 or 2 years after thelarche, or breast development.¹

During the physical examination look for such conditions as abnormal phenotype breast development, abnormal hair distribution, thyroid enlargement, abdominal distention and tenderness, and hepatomegaly. Look for pelvic tumor, cervical lesions, polyps, and tenderness on the pelvic examination. Special diagnostic procedures such as hormonal assays, visual field tests, chest x-rays, laparoscopy, vaginal cytology, colposcopy, ultrasonography, culdocentesis, endometrial curettage, pelvic examination under anesthesia, and many others are helpful.^{2,3}

Abnormal uterine bleeding (AUB) is the name given to describe any deviation from the normal menstrual

cycle. The key characteristics are regularity, frequency, heaviness of flow and duration of flow. Despite this natural inclination, bleeding can arise from the perineum, vulva, vagina, cervix, or fallopian tubes. Bleeding can be related to ovarian pathology. The etiology of bleeding may also be non-gynecologic. Bleeding from the urethra, bladder, or GI tract (anus, rectum, bowel) could be mistaken for vaginal bleeding.^{4,5} Hence; the present study was conducted for evaluating histopathological findings in patients with abnormal uterine bleeding.

MATERIALS & METHODS

The present study was conducted for evaluating histopathological findings in patients with abnormal uterine bleeding. A total of 100 cases were enrolled. Well preserved endometrial tissue from females with AUB were enrolled. Inadequate and autolyzed specimens of endometrium were excluded. Details of the study protocol was explained to the subjects. Complete History was taken. Information on

regularity of the menstrual cycles was taken. Endometrial curettage samples was fixed in 10% formalin and histopathological slides were prepared and stained with hematoxylin and eosin stain. Slides were examined under microscope to confirm the cause of AUB. All the results were analysed by SPSS software. Chi-square test was used for evaluation of level of significance.

RESULTS

Mean age of the patients was 44.2 years. HMB was seen in 81 percent of the patients while frequent

menstrual bleed and intermenstrual bleeding were seen in 59 percent and 31 percent of the patients respectively. Normal/hormonal histopathologic findings were seen in 36 percent of the patients while hyperplasia was seen in 6 percent of the patients. Polyps were seen in 22 percent of the patients (Endometrial polyp – 7 percent; Cervical polyp – 15 percent). Endometrial carcinoma was present in 6 percent of the patients while cervical carcinoma was seen in 5 percent of the patients. Collectively, malignancies were present in 11 percent of the patients.

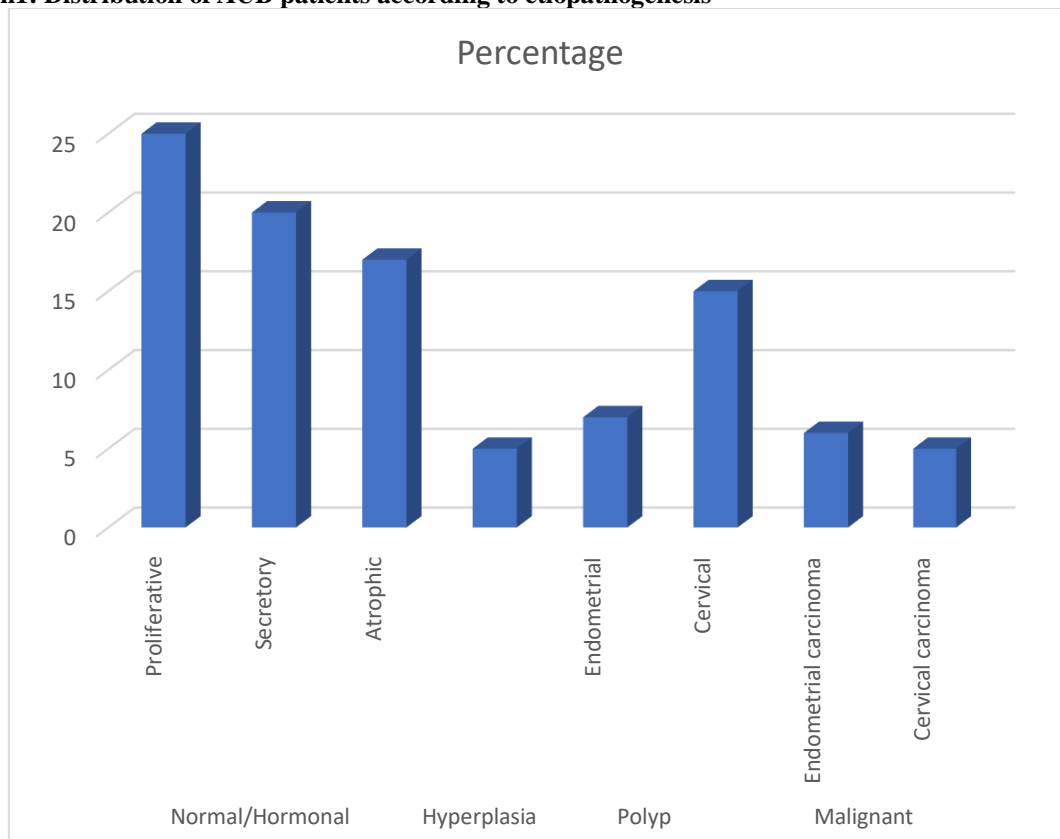
Table 1: Distribution of patients with AUB according to clinical presentation

Clinical presentation	Number of patients	Percentage
HMB	81	81
Frequent menstrual bleed	59	59
Intermenstrual bleeding	31	31

Table 2: Distribution of AUB patients according to etiopathogenesis

Histopathological findings		Number of patients	Percentage
Normal/Hormonal	Proliferative	25	25
	Secretory	20	20
	Atrophic	17	17
Hyperplasia		5	5
Polyp	Endometrial	7	7
	Cervical	15	15
Malignant	Endometrial carcinoma	6	6
	Cervical carcinoma	5	5
Total		100	100

Graph1: Distribution of AUB patients according to etiopathogenesis



DISCUSSION

Abnormal uterine bleeding (AUB) is any bleeding that deviates from normal menstruations. It may differ in terms of frequency of bleeding, durations, and the pattern of bleeding during menstrual cycle or menopause. It is a common gynecological problem for medical visits among women of reproductive age group that have a long list of causes in different age groups. One-third of outpatient visits to the gynecology department are for AUB, and it accounts for more than 70% of all gynecologic consults in the premenopausal and postmenopausal women who suffer from various forms of this disorder at different ages in their life. Some adolescents maybe unaware that their bleedings patterns are abnormal, as menstrual cycles are known to often be irregular during adolescence. The underlying factors that cause AUB and/or AUB itself may have potential for long term health consequences, decrease life quality and affect school attendance. Evaluation of the menstrual cycle should be an additional vital sign to be looked into in any female adolescent during all routine medical visits.⁶⁻⁹ Hence; the present study was conducted for evaluating histopathological findings in patients with abnormal uterine bleeding.

Mean age of the patients was 44.2 years. HMB was seen in 81 percent of the patients while frequent menstrual bleed and intermenstrual bleeding were seen in 59 percent and 31 percent of the patients respectively. Normal/hormonal histopathologic findings were seen in 36 percent of the patients while hyperplasia was seen in 6 percent of the patients. In a previous study conducted by Vijayaraghavan A et al, authors analyzed the histopathological patterns of endometrium in women with AUB. Out of the 160 cases analyzed, the maximum number of biopsies were from the age group of 41-50 years; the majority of patients presented with complaints of menorrhagia. The bleeding pattern was significantly associated with age groups ($p=0.00$). Of 160 cases, 104 cases were related to functional causes. The association of functional and organic causes with age group was not significant ($p=0.67$ and $p=0.99$, respectively). The most common histological pattern was the normal cyclical pattern showing proliferative (56) and secretory phase (30) in 86 cases. Of 42 cases of endometrial hyperplasia, 9 cases had atypical hyperplasia. The endometrial polyp was the other common organic lesion observed. Only two cases of endometrial carcinoma were reported during the present study period.¹⁰

In the present study, Polyps were seen in 22 percent of the patients (Endometrial polyp – 7 percent; Cervical polyp – 15 percent). Endometrial carcinoma was present in 6 percent of the patients while cervical carcinoma was seen in 5 percent of the patients. Collectively, malignancies were present in 11 percent of the patients. In another similar study conducted by Alshdaifat E Het al, authors determine the histopathological pattern of endometrial biopsies in

patients with AUB. Most patients were in the 18-39 year age group, with normal cyclical findings being the most common histopathological finding. Malignant lesions were observed in 42 patients with a majority being older than 50 years. In 13.3% (42/316) of patients, D&C failed to detect intrauterine disorder that was found on hysterectomy. Normal cyclic changes account for the highest proportion of histopathological findings.¹¹ The frequency of different histopathological findings obtained from dilatation and curettage (D&C) specimens in patients with abnormal uterine bleeding (AUB) was assessed in another previous study conducted by Soleymani E et al. In a retrospective review of 591 specimens, the included subjects were all women with AUB. The majority of patients (61.6%) were in the 41-50 year age group. Totally, 81.4% of patients had normal pathology. The disordered proliferative endometrium/polyps, hyperplasia, and malignant pathology were found in 15.4, 2.5, and 0.7% of specimens, respectively. The abnormal pathologies were seen more among patients with postmenopausal status, nulli-/primigravid women, and those with hypertension, diabetes, hypothyroidism, and polycystic ovary syndrome.¹²

CONCLUSION

Normal cyclic changes account for the highest proportion of histopathological findings. However, malignancies are important causes of AUB.

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