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## Clinico-pathological evaluation dysfunctional uterine bleeding

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### Abstract

**Background:** Abnormal uterine bleeding (AUB) is one of the most common gynecologic presentations. The present study was conducted to assess clinical and pathological dysfunction uterine bleeding in females.

**Materials & Methods:** The present study was conducted on 82 females reported with uterine bleeding. Endometrial tissue obtained by Dilatation and Curettage was immediately kept in 10% formalin and subjected to histopathology. Time of endometrial biopsy was taken after 15 days from the last menstrual period.

**Results:** Out of 82 females, menorrhagia was seen in 38, menorrhagia in 2, polymenorrhea in 16, oligomenorrhoea in 20, polymenorrhagia in 6. The difference was significant ( $P < 0.05$ ). Parity in females was nullipara in 10, primipara in 14, Multipara in 56 and grand multipara in 2. The difference was significant ( $P < 0.05$ ). Endometrial status was proliferative in 15, secretory in 10, atrophic in 6, simple in 11, complex in 24, hyperplastic in 12 and endometrial polyp in 4. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Authors found that endometrial status was proliferative, secretory, atrophic, simple, complex, hyperplastic and endometrial polyp.

**Keywords:** Endometrial, uterine, bleeding

### Introduction

In normal menstruation, cycle length is 21-35 days, duration of menstrual blood flow is 2-7 days and blood loss is 20-80ml<sup>[1]</sup>. Any deviation from this normal pattern is recognized as abnormal. Any vaginal bleeding is abnormal in postmenopausal women. Abnormal uterine bleeding (AUB) is one of the most common Gynecologic presentations which prompt a patient to consult the Gynecological. AUB is categorized into two broad groups<sup>[2]</sup>. First is due to organic causes, having some pathology like fibroid, polyp etc and the second is the so called Dysfunctional uterine bleeding (DUB) when there is absence of organic disease of the genital tract or in other words 'abnormal bleeding from the uterus unassociated with tumor, inflammation or pregnancy'<sup>[3]</sup>.

The bleeding is unpredictable in many ways. It may be excessively heavy or light and may be prolonged, frequent, or random. DUB can occur during lifespan of a woman at any time from menarche, occasionally even after the menopause in ovulatory and anovulatory cycles. This condition has enormous consequences with regard to social life, morbidity, and clinical load. DUB can be classified into primary, secondary and iatrogenic groups<sup>[4]</sup>. Primary DUB is due to dysfunction arising in the hypothalamo-pituitary-ovarian axis or dysfunction in the endometrium itself. Secondary DUB is due to endocrinopathies, hematological, vascular disease, liver disorders<sup>[5]</sup>. The present study was conducted to assess clinical and pathological dysfunction uterine bleeding in females.

### Materials & Methods

The present study was conducted in the Department of General Pathology and Department of Gynaecology. It consisted of 82 females reported with uterine bleeding. Ethical clearance was obtained from the institutional ethical committee. All patients were informed regarding the study and written consent was obtained.

Data such as name, age, gender etc. was recorded. Endometrial tissue obtained by Dilatation and Curettage was immediately kept in 10% formalin and subjected to histopathology.

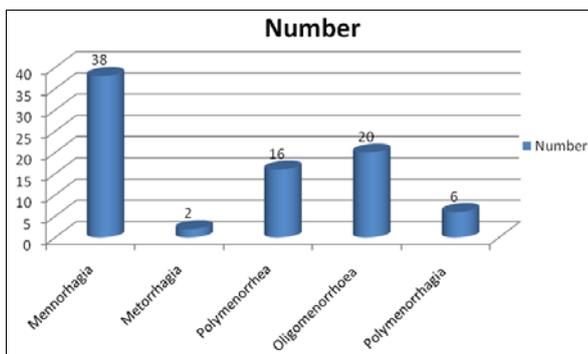
Time of endometrial biopsy was taken after 15 days from the last menstrual period. Results were tabulated and subjected to statistical analysis. P value <0.05 was considered significant.

**Results**

**Table 1:** Menstrual pattern of patients

Pattern	Number	P value
Menorrhagia	38	0.01
Metorrhagia	2	
Polymenorrhoea	16	
Oligomenorrhoea	20	
Polymenorrhagia	6	

Table I, graph I shows that out of 82 females, menorrhagia was seen in 38, menorrhagia in 2, polymenorrhoea in 16, oligomenorrhoea in 20, polymenorrhagia in 6. The difference was significant ( $P < 0.05$ ).

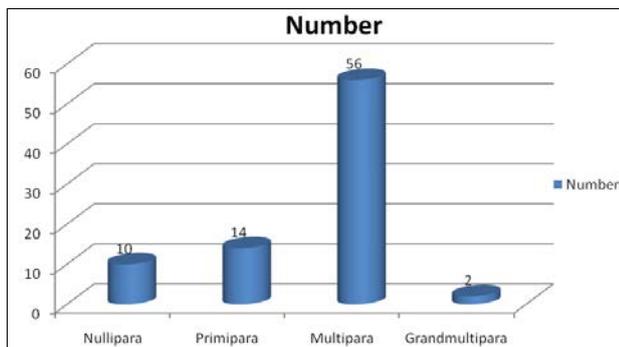


**Graph 1:** Menstrual pattern of patients

**Table 2:** Distribution of women according to parity

Parity	Number	P value
Nullipara	10	0.01
Primipara	14	
Multipara	56	
Grand multipara	2	

Table II, graph II shows that parity in females was nullipara in 10, primipara in 14, Multipara in 56 and grand multipara in 2. The difference was significant ( $P < 0.05$ ).

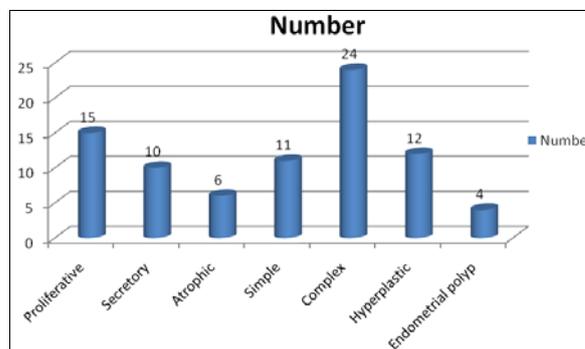


**Graph 2:** Distribution of women according to parity

**Table 3:** Histopathological finding in females

Endometrial status	Number	P value
Proliferative	15	0.01
Secretory	10	
Atrophic	6	
Simple	11	
Complex	24	
Hyperplastic	12	
Endometrial polyp	4	

Table III, graph II shows that endometrial status was proliferative in 15, secretory in 10, atrophic in 6, simple in 11, complex in 24, hyperplastic in 12 and endometrial polyp in 4. The difference was significant ( $P < 0.05$ ).



**Graph 3:** Histopathological finding in females

**Discussion**

Abnormal uterine bleeding (AUB) is one of the most common Gynecologic presentations which prompt a patient to consult the Gynecological. Dysfunctional uterine bleeding (DUB) is defined as excessively heavy, prolonged, or frequent bleeding of uterine origin that is not due to pregnancy or any recognizable pelvic or systemic cause. AUB is categorized into two broad groups [6]. First is due to organic causes, having some pathology like fibroid, polyp etc. and the second is the so called Dysfunctional uterine bleeding (DUB) when there is absence of organic disease of the genital tract or in other words ‘abnormal bleeding from the uterus unassociated with tumor, inflammation or pregnancy. The bleeding is unpredictable in many ways. It may be excessively heavy or light and may be prolonged, frequent, or random. DUB can occur during lifespan of a woman at any time from menarche, occasionally even after the menopause in ovulatory and anovulatory cycles [7]. The present study was conducted to assess clinical and pathological dysfunction uterine bleeding in females. In this study, out of 82 females, menorrhagia was seen in 38, menorrhagia in 2, polymenorrhoea in 16, oligomenorrhoea in 20, polymenorrhagia in 6. Dungal *et al.* [8] found that ages of the patients having dysfunctional uterine bleeding were ranging from 21 -70 years. Dysfunctional uterine bleeding was most common in the age group 41-50yrs (41.25%) followed by 31- 40yrs (28.75%). Majority were multipara (81.87%). Menorrhagia (51.87%) was the most common presentation. Majority of cases histopathology of endometrium revealed proliferative

pattern (41.88%) followed by hyperplastic type (27.5%). 21.88% had secretory endometrium, 2.5% had atrophic endometrium and 1.25% cases had endometrial carcinoma.

We found that parity in females was nullipara in 10, primipara in 14, Multipara in 56 and grand multipara in 2. Endometrial status was proliferative in 15, secretory in 10, atrophic in 6, simple in 11, complex in 24, hyperplastic in 12 and endometrial polyp in 4. Ha *et al.* [9] found that a total of 120 cases were included. The age of the patients diagnosed dysfunctional uterine bleeding were ranging from 24 -63years. Dysfunctional uterine bleeding was most common in the age group 40-44yrs (30%) followed by 45-49yrs (27.5%). Menorrhagia (41.7%) was the most common presenting sign. Majority histopathology of endometrium revealed anovulatory pattern (61.7%) followed by ovulatory (38.3%). Of the cases with an anovulatory pattern 48.6% was proliferative endometrium, 33.8% disordered proliferative endometrium, 6.8%atrophic, 5.4% weakly proliferative and 2.7% each of simple hyperplasia without atypia and complex hyperplasia with atypia. All cases with ovulatory pattern showed secretory endometrium.

DUB also develops when ovulation occurs but corpus luteum function is insufficient leading to irregular ripening of endometrium (luteal phase defect) or there may be abnormal persistence of corpus luteum leading to irregular shedding. Secretory bleeding pattern in ovulatory DUB may be described when there is bleeding present in secretory but non menstrual background. Apart from complete history, thorough clinical examination detailed investigations including bleeding time, clotting time, platelet count, prothrombin time, comment on peripheral smear, TSH, FT3 and FT4 to be done to diagnose any medical illness, ultrasonography of pelvis is an added beneficial tool to exclude organic pathology [10].

### Conclusion

Authors found that endometrial status was proliferative, secretory, atrophic, simple, complex, hyperplastic and endometrial polyp.

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