

Research Article

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ABSTRACT :

Abnormal uterine bleeding is the common presenting complaint in the Gynaecology outpatient department in all age groups. Histopathological evaluation of the endometrial samples plays a significant role in the diagnosis of abnormal uterine bleeding.

The study is planned to evaluate the pathological conditions in endometrium of the patients having abnormal uterine bleeding and its correlation with clinical condition.

The 50 women's having age from 20-60 history of abnormal uterine bleeding was studied. Endometrial tissue collected by sampling procedure such as Dilatation and Curettage (D&C), endometrial biopsies had been sent to the pathology lab for evaluation.

The histopathological study of the endometrium showed Proliferative Endometrium as prominent histopathological pattern in 18 patients. Secretory Phase was seen in 12 women, Endometrial Hyperplasia is seen in 8, Menstrual Phase observed in 3 patients. Atrophic Endometrium was followed in 7 patients followed by Endometrial Metaplasia in 2 patients.

Key-words: Abnormal Uterine Bleeding, Histopathology, Endometrium.

INTRODUCTION:

Abnormal genital tract bleeding based in the uterus and found in the absence of demonstrable structural [1] or organic pathology. It is usually due to hormonal disturbances: reduced levels of progesterone causes low levels of prostaglandin F₂α and causes menorrhagia; increased levels of tissue plasminogen activator (TPA) (a fibrinolytic enzyme) leads to more fibrinolysis.

Dysfunctional uterine bleeding (DUB) is abnormal bleeding from the vagina that is due to changes in hormone levels. It is bleeding that is NOT caused by:

- Pregnancy or miscarriage
- Medical conditions, such as cancer or fibroids
- Problems with the uterus or vagina from infection or other causes

It can be classified as ovulatory or anovulatory, depending on whether ovulation is occurring or not.

Some sources state that the term implies a hormonal mechanism. [2] Use of the term "dysfunctional uterine bleeding" is currently discouraged in favor of the term "abnormal uterine bleeding."

10% of cases occur in women who are ovulating, but progesterone secretion is prolonged because estrogen levels are low. This causes irregular shedding of the uterine lining and break-through bleeding. Some evidence has associated Ovulatory DUB with more fragile blood vessels in the uterus.

It may represent a possible endocrine dysfunction, resulting in menorrhagia or metrorrhagia. Mid-cycle bleeding may indicate a transient estrogen decline, while late-cycle bleeding may indicate progesterone deficiency.

Bleeding in any of the following situations is abnormal:

- Bleeding between periods
- Bleeding after sex
- Spotting anytime in the menstrual cycle
- Bleeding heavier or for more days than normal
- Bleeding after menopause

Menstrual cycles that are longer than 35 days or shorter than 21 days are abnormal. The lack of periods for 3–6 months (amenorrhea) also is abnormal.

Following are the tests which are used for diagnosis of the abnormal uterine bleeding:

- Sonohysterography—Fluid is placed in the uterus through a thin tube, while ultrasound images are made of the uterus.
- Ultrasound—Sound waves are used to make a picture of the pelvic organs.
- Magnetic resonance imaging—in this imaging test, powerful magnets are used to create images of internal organs.
- Hysteroscopy—a thin device is inserted through the vagina and the opening of the cervix. It lets the health care provider view the inside of the uterus.
- Endometrial biopsy—using a small or thin catheter (tube), tissue is taken from the lining of the uterus (endometrium). It is looked at under a microscope.

There are many conditions clinical condition and diagnosis does not correlate with histopathological condition. The study is planned to evaluate the pathological conditions in endometrium of the patients having abnormal uterine bleeding and its correlation with clinical condition.

Methodology:

The study was planned in 50 female's patients in north Indian rural hospital. The patients referred to Out Pa-

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tients Department (OPD) in Obstetrics and Gynaecology department are enrolled into study. All patients were informed consents. The aim and the objective of the study were conveyed to patients.

The 50 women's having age from 20-60 history of abnormal uterine bleeding was studied. Endometrial tissue collected by sampling procedure such as Dilatation and Curettage (D&C), endometrial biopsies had been sent to the pathology lab for evaluation [3].

Detailed clinical history like age, menstrual status including pattern, period & regularity of cycle were obtained relevant findings of general, systemic examination were recorded.

Result & Discussion:

The Endometrial pathology basis of the abnormal uterine bleeding is studied in 50 patients. The evaluation had been reported following data.

Table 1 : Age group & Parity

Age (years)	No. of womens
Null Parity	1
Parity 1	2
Parity 2	6
Parity 3	14
Grand multipara	27
Total	50

Table 2: Bleeding type with number of patients

Bleeding Type	No. of womens
Heavy Menstrual Bleeding	14
Frequent Menstrual Bleeding	9
Heavy or Prolonged Bleeding	7
Intermenstrual Bleeding	8
Infrequent Menstrual Bleeding	8
Postmenopausal bleeding	4
Total	50

The table 2 showed the type of bleeding. The Heavy Menstrual Bleeding was found in maximum cases i.e in 14 womens. The Frequent Menstrual Bleeding was seen in 9 womens. 7 patients shoed Heavy or Prolonged Bleeding. Intermenstrual Bleeding and Infrequent Menstrual Bleeding was observed in each 8 patients. 4 patients showed the Postmenopausal bleeding.

Table 3 : Endometrial Histopathology observation

Endometrial Histopathology observation	No. of womens
Proliferative Endometrium	18
Secretory Phase	12
Endometrial Hyperplasia	8
Menstrual Phase	3
Atrophic Endometrium	7
Endometrial Metaplasia	2
Total	50

The table 3 showed the Proliferative Endometrium as

prominent histopathological pattern in 18 patients. Secretory Phase was seen in 12 womens, Endometrial Hyperplasia is seen in 8, Menstrual Phase observed in 3 patients. Atrophic Endometrium was followed in 7 patients followed by Endometrial Metaplasia in 2 patients.

The endometrium undergoes periodic changes in response of the hormonal changes.

Abnormal uterine bleeding occurs as heavy, prolonged or acyclic flow at menopausal transition or as spotting or minimal bleeding at post-menopausal period needs thorough evaluation, since it may be clinical manifestation pointing towards endometrial cancer [4].

According to WHO the endometrial hyperplasia are classified as simple or complex. It is based on the absence or presence of architectural abnormalities like glandular complexity and crowding, further designated as atypical if they show nuclear atypia [5].

The incidence of abnormal uterine bleeding was more in perimenopausal age group than postmenopausal age group, may be due to earlier evaluation and treatment of these patient [6].

Conclusion:

The histopathological study of endometrium in females with abnormal uterine bleeding above the age of 40 years plays an important role in diagnosing various histological patterns and aetiopathological factors. Hence histopathological examination is mandatory, in cases of peri-menopausal and postmenopausal abnormal uterine bleeding.

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