

## Evaluation of Abnormal Uterine Bleeding in Perimenopausal Age Group



### Medical Science

**KEYWORDS :** abnormal uterine bleeding (AUB), hysteroscopy, perimenopausal woman, curettage

**Dr.Jagruti Brahmbhatt**

**Dr.Y.J.Vasavada**

**Dr.Krutik Brahmbhatt**

### ABSTRACT

#### Background

One third of all gynecological consultations are because of abnormal uterine bleeding (AUB). This proportion rises to more than two third when perimenopausal women are considered. This study attempts to analyze place of different diagnostic modalities available in the evaluation of abnormal uterine bleeding in terms of accuracy of finding.

#### Aims and objectives

This study aims to analyze and compare three different diagnostic modalities (ultrasound, dilatation and curettage (D&C) and hysteroscopy) in evaluation of abnormal uterine bleeding.

#### Material and methods:

A total of 80 women between age group 35-50 years with h/o abnormal uterine bleeding were selected randomly and underwent ultrasonography as a office procedure. Out of which, cohort of 45 patients were further evaluated with dilatation and curettage followed by diagnostic hysteroscopy. Findings were compared and analysis was done.

#### Results

Commonest bleeding pattern came across was menorrhagia (40%). Detection rate of organic pelvic pathologies were 44.4% and 64.5% with ultrasonography and hysteroscopy respectively. Most common organic lesion found was fibroid (20%) followed by adenomyosis (13%). On dilatation and curettage, most common histopathological pattern found was proliferative endometrium (55%) followed by secretory in 15.5% of cases. Misplaced intrauterine device was found with hysteroscopy in two of our patients.

#### Conclusion:

Diagnostic hysteroscopy together with dilatation and curettage and pelvic ultrasonography can establish an accurate diagnosis in majority of patients of abnormal uterine bleeding. None of the technique can replace the other but all three are complementary to each other.

### INTRODUCTION:

One third of all gynecological consultations are because of abnormal uterine bleeding (AUB). This proportion rises to more than two third when perimenopausal women are considered. In normal to 12 weeks size uterus, the cause of abnormal bleeding often remains obscure. This study attempts to analyze place of different diagnostic modalities available in the evaluation of abnormal uterine bleeding in terms of accuracy of finding.

### AIMS AND OBJECTIVE:

This study aims to analyze and compare three different diagnostic modalities (ultrasonography, dilatation and curettage and hysteroscopy) in evaluation of abnormal uterine bleeding. Also to know incidence of organic pathologies responsible for abnormal bleeding in perimenopausal women.

### MATERIAL AND METHOD:

This is a prospective cross sectional study carried out in Gynecology Department of Sheth V.S.General Hospital, Ahmedabad in the year 2003-2004. A total of 80 women with AUB attending to outpatient department (OPD) were selected randomly. All were between 35-50 years age group. Thorough clinical evaluation and gynecological examination was done. Routine investigations like Hb%, ABO & Rh blood grouping, blood sugar, Urine routine and microscopy were carried out. Whenever required, hormonal evaluation was done in form of Thyroid function test, S.Prolactine, Pituitary Gonadotropins and S.Androgen level with consent.

Women above 40 yrs, were subjected to Pap smear examination.

USG was performed in all women as a routine office procedure. Scanning was done trans abdominally as well as transvaginally.

Women with ET >10mm on USG, or having H/o hypertension and/or diabetes and those who were not responding to medical management were counselled for further evaluation.

Out of total 80, 45 women had given postcounseling informed consent and were included in the study for further evaluation by dilatation and curettage followed by hysteroscopy.

43 women had undergone dilatation and curettage as a planned procedure while in two women dilatation and curettage was performed as an emergency procedure for heavy prolonged menstruation.

After analyzing histopathological report of curettage material, all women were admitted in their early proliferative phase for hysteroscopy.

### RESULT:

**TABLE 1. BLEEDING PATTERN:**

pattern	Total no of patients(n=45)	Percentage
menorrhagia	18	40.00%
polymenorrhoea	06	13.33%
metrorrhagia	04	08.88%
polymenorrhagia	17	37.77%

Commonest bleeding pattern in our study was menorrhagia(40%), followed by polymenorrhagia(37.77%).

**TABLE 2 :FINDINGS DETECTED ON ULTRASONOGRAPHY:**

Findings	Total no of patients(n=45)	Percentage
Normal	25	55.55%
Fibroid	09	20.00%
Adenomyosis	06	13.00%
Ovarian cyst	02	04.40%
Polyp	03	06.60%

Total 25 patients (55.55%) shows normal findings on USG while

most common organic lesions came across are fibroid (20%) and adenomyosis(13%).

**TABLE 3: HISTOPATHOLOGICAL PATTERNS OF ENDOMETRIUM ON DILATATION AND CURETTAGE:**

Patterns	Total no of patients(n=45)	Percentage
Proliferative phase	25	55.00%
Secretory phase	07	15.50%
Mixed pattern	03	06.60%
hyperplasia	07	15.50%
Senile endometritis/atrophic endometrium	03	06.60%

Total 71% of patients has shown oestrogenic influence,out of which 25patients(55%) had proliferative pattern and 07 patients (15.5%) had endometrial hyperplasia. Another 07 patients (15.5%) had secretory pattern showing progesterogenic influence while 03(06.60%) was having mixed pattern.

**TABLE 4: HYSTEROSCOPIC FINDING:**

Findings	Total no ofpatients(n=45)	Percentage
normal	16	35.00%
Endometrial hyperplasia	08	19.00%
Atrophic endometrium	04	07.00%
Submucous fibroid	10	23.00%
Endometrial polyp	07	15.00%

Total of 16 patients (35%) had shown normal findings suggestive of abnormal uterine bleeding without any organic pathology detected, while 64.50% were having organic cause for abnormal bleeding. Commonest cause was submucous fibroid (23%) followed by endometrial hyperplasia (19%),endometrial polyp(15%) and atrophic endometrium(7.6%).

**TABLE 5: CORRELATION OF HYSTEROSCOPIC FINDING WITH DILATATION AND CURETTAGE:**

Diagnosis	Ultrasonography (n=45)		Per Hysteroscope	
	No. of patients	percentage	No. of patients	Percentage
Fibroid	09	20.00%	11	24.40%
Polyp	03	06.60%	07	15.50%
Other pathologies	-	-	05	11.11%

Detection rate of Fibroid and polyp were 20% and 6% respectively on Ultrasonography. While hysteroscopy had detected fibroid in 24.40% and polyp in 15.50% along with other pathologies in 11.11% of cases. Still ultasonography has it's roll in rulling out associated pathologies present outside uterine cavity for which hysteroscopy fall short due to technical limitations.

**TABLE 6: CORRELATION OF HYSTEROSCOPIC FINDINGS WITH HISTOPATHOLOGICAL EXAMINATION REPORT:**

Hysteroscopic finding	No. of patients	Histopathological finding	No. of patients
Atrophic endometrium	04	Senile Endometrium	02
Hypertrophic endometrium	08	Swisscheese/ Hypertrophic endometrium	06
Normal endometrium	10	Proliferative/ Secretory Endometrium	14

As shown in table, hysteroscopic findings correlates with histopathological reports in most of the cases, suggests superiority of hysteroscopic directed biopsy (of suspicious area) over dilatation and curettage.

**DISCUSSION:**

In our study common age group of patients is 35-50 years of age. Shwaezler[2] studied a total of 104 patients with age vary-

ing from 26 to 79 yrs. Tahir [3] studied 400 women all above age of 35 yrs. Gianninoto [4] performed diagnostic hysteroscopy in 512 women with c/o abnormal uterine bleeding, age varying from 38to 80 yrs and with mean age 63yrs.

Commonest bleeding pattern in our study is menorrhagia (40%) followed by polymenorrhagia (13.33%). Menorrhagia as the primary indication for hysteroscopy was reported in 49.60% by Sciarra and Valle [5]and 37.5% by Hamou [6] while abnormal perimenopausal uterine bleeding 56.30% are the main indications in study of Pasqualotto et al.

Hysteroscopic review of 90 cases,conducted by Trivedi and Rawal [12] shows commonest pattern polymenorrhagia (23.3%) followed by polymenorrhhea(20%).

Incidence of positive findings on hysteroscopy ranges from 52% in studies of Baggish and Barbot [8] and Schwarzler [2] to 66% in Bhattacharya[9] and 64.5% in present study to as high as 94.6% in Hamous [6] study.

Incidence of endometrial polyps has ranged from 9.1% in Homous [6] series to 15% in the present study, 45.9% in Pasqualotto [9] series and 31.4% in series of valle [10].

The incidence of hyperplastic endometrium in patients of AUB in the present study is 15.5% with conventional dilatation and curettage while 19% with hysteroscopy. All our patients were subjected to hysteroscopic directed biopsy and further management planned according to histopathological type of endometrium.

The incidence of submucosal fibroid ranges from 23% in our study to 28% in Schwarzlers [2] study.

7.6% of women having atrophic endometrium in present study, while the incidence was 6% in Sciarra and Valle[5],14.6% in Hamou et al[6],12.6% in Valle[10],this is reassuring and biopsies of suspicious areas even when the endometrium looks atrophic can drastically exclude the risk of endometrial carcinoma.

In two of our patients, unknown misplaced intrauterine contraceptive device (IUCD) were reported which were removed with hysteroscope in same sitting. The practice of inserting IUCDs in women undergoing MTP or postdelivery who are not willing for any contraception is prevalent in many hospitals and could be a fallout of the target oriented approach to family planning. Such a practice should be abandoned and greater stress laid on counselling and voluntary acceptance of contraception.

Out of Total 20 women subjected to pap smear examination,30% had shown nonspecific inflammatory changes while 70% had normal pap test study.

**Conclusion:**

Conventional dilatation and curatage is helpful as a therapeutic measure to stop bleeding as well as to provide endometrial sample for HP examination ,still fall short for diagnosis of focal intracavitary lesions, like polyp, submucous myoma and focal hyperplasia.While pelvic ultrasound being noninvasive , painless and conventional procedure ,superior to D&C and hysteroscopy as a diagnostic tool, do not allow direct visualization and chance to take biopsy as hysteroscopy will do. Hysteroscopy provide simple and easy method for visualization of cervical canal and uterine cavity. Skill of hysteroscopy can be easily acquired. It is well tolerated, economical and has good patient acceptability. When combined with D&C and pelvic ultrasound, it can establish an accurate diagnosis in majority of patients thereby reducing the burden of hysterectomy.

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