



Hysteroscopy in Abnormal Uterine Bleeding vs Ultrasonography and Histopathology Report in Perimenopausal and Postmenopausal Women

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ABSTRACT

Introduction: Abnormal uterine bleeding is one of the most common morbidity landing women to attend medical attention in gynecology outpatient department. This study aims to evaluate the hysteroscopy finding in diagnosis of AUB and its correlation with ultrasonography finding and histopathological reports.

Methods: This was a prospective comparative study in which ultrasonography was performed in fifty patients with abnormal uterine bleeding attending OPD then hysteroscopy was performed. After removing hysteroscopy dilation and curettage was done and sample sent for histopathology. At the end reports of hysteroscopy finding were compared with sonographic and pathological results.

Results: In the study women aged from 45 to 64 years with the symptoms duration of 15 days to 6 months. Post menopausal women seek medical attention more early than the menstruating women. Common symptoms are menorrhagia, metrorrhagia and postmenopausal bleeding. Most common abnormality was menorrhagia (32%) followed by post menopausal bleeding 28%. Ultrasonography showed 46% of abnormal finding in which 17 (47%) menstruating women and 6 (43%) women were postmenopausal women. Among 50 women 17 (34%) had negative finding and 43 (66%) had abnormal finding in which most common finding of hyperplastic endometrium. Hysteroscopy correctly diagnose atrophic endometrium, polyp and endometrial Ca which is also confirmed by histopathology finding.

Conclusions: Hysteroscopy is reliable method for evaluating cases of AUB and it can be used as first line diagnostic method for benign lesions. Hysteroscopy guided biopsy has most accurate in diagnosing pathology.

Keywords: AUB; D and ; Hysteroscopy, OPD; Ultrasonography.

INTRODUCTION

AUB is commonest gynecological problem seen in OPD comprising 30-70% of women of premenopausal period. Main causes are uterine fibroid, endometrial hyperplasia, carcinoma of endometrial and cervix.¹ AUB accounts for two third of hysterectomies.²

Any vaginal bleeding after menopause is considered

abnormal and requires evaluation in postmenopausal women.^{3,4}

USG is noninvasive method with good accuracy in

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diagnosing endometrial abnormalities but has low specificity and sensitivity.⁵ Hysteroscopy allows direct visualization of uterine cavity allowing for accurate diagnosis.

Traditionally D and C used to be mainstay of investigation for AUB but it is not accurate for diagnosing focal intrauterine lesion or located in areas difficult to curette so anything which improve the accuracy of diagnosing the cause of bleeding can reduce the frequency of hysterectomy as a cure.

This study aimed to assess the feasibility of hysteroscopy for diagnosing AUB in correlation with ultrasonographic and histological findings.

METHODS

This is a crosssectional study conducted from 1st January to 31st June 2014. All the patient who fit our criteria were included and was conducted in the out-patient department of gynecology at Kathmandu Medical collage teaching hospital, Kathmandu, Nepal.

Detailed clinical history was taken and general, systemic and pelvic examination was done. All patient underwent pelvic ultrasound and hysteroscopy followed by dilation and curettage.

Ultrasound was done and uterine size, contour, intramural, sub mucosal lesion if any seen and endometrial thickness were noted. Endometrial echo complex ≥ 15 mm in menstruating women and ≥ 5 mm in postmenopausal women were considered abnormal.

After informed consent hysteroscopy was performed in Operation Theater under intravenous anesthesia.

Ringer lactate was used as a distending medium in hysteroscopy. Systemic examination of uterine cavity was performed and internal OS and cervical canal visualized and finding noted. Finally dilatation and curettage was performed and tissue collected in formalin and sent for histopathological examination.

Abnormal Uterine bleeding for the age group 45 years to 64years old was included. The Duration of symptom was 15 days to 6 months were included. Bleeding disorder and patient taking anticoagulant, age group between <45 and age >64, duration of symptoms of <15 days and duration of symptoms >6months were excluded. Date were collected and placed in SPSS then statistical analysis was performed.

RESULT

Patient in the study aged from 45 to 64years with the symptoms duration of 15 days to 6months. Post menopausal women seek medical attention more early then the menstruating women. Common symptoms are menorrhagia, metrorrhagia and postmenopausal bleeding. Most common abnormality was menorrhagia (32%) followed by post menopausal bleeding 28 % (Table 1).

Table 1. Bleeding abnormality (n = 50).

Abnormal uterine bleeding pattern	n (%)
Menorrhagia	16 (32)
Post menopausal bleeding	14 (28)
Menometrorrhagia	10 (20)
Polymenorrhea	6 (12)
Metrorrhagia	4 (8)
Total	50 (100)

Table 2. USG diagnosis and endometrial thickness.

USG diagnosis	Total 50	Endometrial thickness				
		<5mm	6-10mm	11-15mm	16-20mm	>20mm
Normal endometrium	19(38%)	2	10	7		
Thickened endometrium	11(22%)			2	8	1
Myoma	7(14%)		2	1	2	2
Atrophic endometrium	8(16%)	8				
Endometrial polyp	3(6%)		3			
Carcinoma	2(4%)				1	1

Among 50 patients, 36 were menstruating while 14 were already in postmenopausal state. Among 36 menstruating women 17(47%) women had

abnormal endometrial lining and 6(43%) women out of 14 postmenopausal women had endometrial lining more than 5mm. Atrophic endometrium(57%) is the

common finding in post menopausal women leading to AUB. Almost all the abnormalities were picked by hysteroscopy.

Table 3. Hysteroscopy finding.

Hysteroscopy finding	n (%)
Normal endometrium	17 (34)
Hyperplastic endometrium	18 (36)
Atrophic endometrium	9 (18)
Endometrial polyp	3 (6)
Cervical polyp	1 (2)
Endometrial CA	2 (4)
Total	50 (100)

Among 50 women 17(34%) had negative finding and 43(66%) had abnormal finding in which most common finding of hyperplastic endometrium. Hysteroscopy correctly diagnose atrophic endometrium, polyp and endometrial Ca which is also confirmed by histopathology finding. Endometritis was not detected in hysteroscopy only seen in pathology finding.

Table 4. Histopathology finding.

Histopathology finding	n (%)
Proliferative endometrium	22 (44)
Secretory endometrium	10 (20)
Atrophic endometrium	9 (18)
Endometritis	4 (8)
Polyp	3 (6)
CA endometrium	2 (4)
Total	50 (100)

DISCUSSION

Management of abnormal uterine bleeding depends on diagnostic accuracy. Menorrhagia with hyperplastic endometrium was the most common problem in our study. Similar study of Emanuel reported Menorrhagia 41%, metrorrhagia in 40% and postmenopausal bleeding in 18%.⁶

Brooks and Serdin⁷ did hysteroscopy on 29 patients of abnormal uterine bleeding having negative curettage results in 20 and found that 19 had myoma, five had polyp, and two had endometrial atrophy while true negatives were only three. The submucos myoma may be missed during curettage and abnormal bleeding will persist because the myoma has been eroded by scraping. Hysteroscopy was found to better method for diagnosing polyps as three cases were diagnosed in our study.

Hysteroscopy is minimal invasive simple technique allowing the direct visualization of uterine cavity. So, in patients with abnormal uterine bleeding, hysteroscopy gives the immediate diagnosis and prompt and effective treatment. It helps to find focal source of bleeding and perform a visual directed biopsy of the suspected area. It is more accurate diagnosis than blindly done dilation and curettage for intrauterine pathologies, but still histopathology is the gold standard for malignancies. Hysteroscopy guided biopsy and its reports are considered as new gold standard in evaluating a case of abnormal uterine bleeding.

CONCLUSIONS

Hysteroscopy is reliable method for evaluating cases of AUB and it can be used as first line diagnostic method for benign lesions. Hysteroscopy guided biopsy has most accurate in diagnosing pathology.

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