

Clinical study of diagnostic hysteroscopy in abnormal uterine bleeding and its histopathological correlation

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Abstract: BACKGROUND & OBJECTIVES: Abnormal uterine bleeding is the most common complaint in gynaecology and an important source of morbidity. This study evaluates the role of hysteroscopy in the diagnosis of Abnormal Uterine Bleeding and its correlation with histopathological findings.

METHODS: 50 patients with AUB who got admitted at Dr. PSIMS & RF in the Department of Obstetrics and Gynaecology were subjected to panoramic hysteroscopy and subsequent Dilatation and Curettage. Data was collected and analysed.

RESULTS: AUB was more common in 30-39 yrs. The most common presenting complaint was Menorrhagia. Negative hysteroscopic view was seen in 54% cases. Abnormalities seen were: endometrial hyperplasia, polyps, submucous myoma and endometrial atrophy. Both hysteroscopy and curettage were accurate when an abnormality was diagnosed, giving a specificity of 96.15% and positive predictive value of 96.65%. But the ability to diagnose a lesion (sensitivity) was more with hysteroscopy in comparison to curettage. Hysteroscopy revealed more information than curettage 12% and curettage had more in 6% cases.

INTERPRETATION & CONCLUSION: This study confirms the conclusion of many others that hysteroscopy is superior to Dilatation and Curettage in evaluating patients with Abnormal Uterine Bleeding.

Keywords: Hysteroscopy, D&C, Abnormal Uterine Bleeding, Histopathology.

I. Introduction

Although uterine bleeding is a normal physiologic episode occurrence for most women, its characteristics nevertheless vary considerably. The problem is the uterine bleeding has a wide range of diagnostic possibilities and confusion is generated when review and reports fail to outline the diagnostic evaluation of the patient who presents with abnormal uterine bleeding patterns.

Goals of clinical management are primarily dependent upon attaining a correct etiological diagnosis. The history, physical and pelvic examination attempt to determine the site of the bleeding and its source. Information gathered from this will suggest what direction the investigation would take. Traditionally Dilatation and Curettage and Ultrasonography were the most common investigations employed in the evaluation of the causes of abnormal uterine bleeding.

Dilatation and Curettage is a blind procedure and the endometrium has to be sent to the pathologist to study histological patterns and for the report. Ultrasonography clearly depicts the uterine contour and the status of the ovary, but fails to provide adequate information regarding the endometrium.

Hysteroscopy has ushered a new era in the evaluation of abnormal uterine bleeding. By direct visualization of the uterine cavity it is able to pin point the etiology in the majority of the cases. It can accurately detect endometrial hyperplasia and aids in the early diagnosis of endometrial carcinoma and uterine polyps.

Abnormal uterine bleeding is one of the most common complaints with which a patient presents to a gynaecologist. D&C has long been the diagnostic gold standard for abnormal uterine bleeding. However only 70% -80% of the endometrium can be curetted.

The judicious use of hysteroscopy to manage this medical entity adds a new dimension in handling this often perplexing problem. This study has been taken up to analyze the place of hysteroscopy in the evaluation of Abnormal Uterine Bleeding in terms of accuracy of hysteroscopic findings and contribution of the procedure to clinical diagnosis. It also aims to correlate hysteroscopic findings with histopathological results.

II. Material & Methods

The present study is a prospective study, which has been carried out in the department of obstetrics & gynaecology, Dr. PSIMS & RF, AP.

The material for the present study was collected from patients who attended and were admitted in department of obst. & gynaec with abnormal uterine bleeding. 50 consecutive cases of AUB were taken for the study. All the patients in the study were subjected to a thorough physical examination and routine investigations like Hb%, ABO&Rh, blood sugar, urine routine & microscopy followed by hysteroscopy followed by dilatation and curettage after obtaining post counseling informed consent and the

curettings were sent for histopathology analysis. The procedure was performed in the minor operation theatre under IV Anaesthesia.

The results of hysteroscopy and endometrial histopathology were studied and analysed. The analysed data was compared with other series of literature and discussed. A master chart dealing with all aspects has been designed and presented.

Exclusion criteria

Patients with severe anaemia due to menorrhagia were excluded since they require immediate intensive care.
patients with profuse bleeding.
cases with large or multiple fibroids.
infection in uterine tract.
cases of carcinoma cervix

III. Observation

In the present study panoramic hysteroscopy was performed using a 4 mm hysteroscope with 30 degrees fore oblique lens (kalekar, India) in 50 patients who presented with abnormal uterine bleeding followed by dilatation and curettage. The curetted endometrium was sent for histopathological analysis.

In the present study maximum age incidence was between 30-39, the youngest patient in this study was 24 yrs old and the oldest was 60 yrs.

Table no. -1 Age incidence

Age group	No. of patients	Percentage
20-29	2	4
30-39	20	40
40-49	18	36
50-60	10	20

Of the 50 patients majority, 21 (42%) had symptoms for more than 1 year, 15 patients (30%) had symptoms for 6 months to 1 year and 14 patients (28%) had symptoms for less than 6 months.

Table no -2 Duration of symptoms

Duration	No. of patients	Percentage
<6 months	14	28
6m-1year	15	30
>1year	21	42

Majority of the patients presented with menorrhagia. The second commonest had post menopausal bleeding, 16 cases (32%). There were 6 cases(12%) with polymenorrhagia and 5 patients (10%) with metrorrhagia.

Table no - 3 Clinical presentation

Presentation	No.of patients	Percentage
menorrhagia	23	46
Polymenorrhoea	6	12
metrorrhagia	5	10
Post-menopausal bleeding	16	32

Abnormal findings were seen in 23 patients (46%), while in the remaining 27 patients (54%), no abnormality was detected (negative hysteroscopic view).

The most common abnormality was endometrial hyperplasia (10 casers,20%), followed by endometrial polyps(7 cases, 14%). There were also 2 cases (4%) of submucous myomas, 3 cases(6%) of endometrial hypertrophy and 1 case(2%) of endometritis.

In the 27 cases(54%) of negative hysteroscopic view, 2 abnormal findings were detected on histopathology, 1 case each of endometrial atrophy and endometritis. 1 case of endometritis reported on hysteroscopy was diagnosed as normal.

One of the most consistent findings in this study has been the detection of intra uterine pathology like endometrial hyperplasia (10 cases, 20%), endometrial polyp (7 cases, 14%) and submucous myoma (2 cases, 4 %) with 100% accuracy with hysteroscopy.

Table no. 4 Findings at hysteroscopy

findings	No. of patients	Percentage
Normal	27	54
Endometrial hyperplasia	10	20
Endometrial polyps	7	14
Submucous myoma	2	4
Endometrial atrophy	3	6
Endometritis	1	2

Of the 30 normal cases (60 %) reported, 5 cases had abnormal findings. The diagnosis of 4 cases of Endometrial polyps and 1 case of submucous myoma was missed by endometrial histopathology.

Histopathology correctly diagnosed all cases of endometrial hyperplasia (10 cases, 20%), atrophic endometrium (4 cases, 8 %), endometritis (1 case, 2%) and irregular ripening (1 case, 2%) with 100% accuracy.

Table no - 5 Findings at endometrial histopathology

findings	No. of patients	percentage
Normal	30	60
Endometrial hyperplasia	10	20
Simple	5	
Cystoglandular	4	
Adenomatous	1	
Endometrial polyps	3	6
Submucous myoma	1	2
Endometrial atrophy	4	8
endometritis	1	2
Irregular ripening	1	2

IV. Discussion

In the present study, diagnostic hysteroscopy was performed in 50 consecutive cases of AUB and its correlation with histopathological findings were sought.

The age group in this study was between 20-60years and maximum incidence was between 30-39 years. Panda found that maximum age incidence was between 35-45yrs in range between 25-70 yrs. In Gianninotos series age range was 38-80yrs and commonest incidence was between 30-45yrs. Trotsenburg reported maximum age incidence between 41-50yrs

The commonest presenting complaint in this series was menorrhagia 46%, followed by post menopausal bleeding(32%) and polymenorrhoea (12%). Panda's series had 60% cases of menorrhagia followed by polymenorrhagia and metrorrhagia.

In this study abnormal finding on hysteroscopy in 23 patients (46%), while in the remaining 27 patients(54%). No abnormality was detected.

In the present study , the results of hysteroscopy and dilatation and curettage were in agreement in 82% patients, hysteroscopy revealed more information than curettage in 12 % patients and curettage revealed more information than hysteroscopy in 6% patients .

This is comparable to other similar studies which shows that Panoramic Hysteroscopy is better than curettage in the evaluation of abnormal uterine bleeding.

V. Conclusion

This study confirms that hysteroscopy superior to curettage in evaluating patients with abnormal uterine bleeding.

Hysteroscopy is the safe, reliable and quick procedure in diagnosis of cases with abnormal uterine bleeding with high sensitivity, specificity and negative predictive value.

The concern of todays gynaecologist while evaluating abnormal uterine bleeding is not to miss a significant cancerous lesion. The chances that such a lesion would be missed is rare, if we stick to the criteria for negative hysteroscopic view and usually no further investigations may be necessary.

It would be prudent to obtain endometrial tissue for histopathological examination, especially in peri or post menopausal patients inspite of negative hysteroscopic view.

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