

ORIGINAL ARTICLE

Hysteroscopy for Abnormal Uterine Bleeding

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ABSTRACT

Introduction :

Abnormal Uterine Bleeding is one of the most common complaints of the women attending gynec OPD which requires proper endometrial cavity evaluation. Hysteroscopy has been shown to be highly accurate in diagnosing abnormalities of the endometrial cavity, tubal ostia, and endocervical canal. The aim of the study is to evaluate the feasibility of hysteroscopy in abnormal uterine bleeding and correlate the findings of hysteroscopy with histological findings. **Methods :** The present study "Hysteroscopy for Abnormal Uterine Bleeding" is a prospective study, carried out from July 2016 to February 2018 at our institute, V.S. General Hospital, Ahmedabad and 60 cases were taken up for the study. The results of hysteroscopy and endometrial histology were studied and analyzed.

Results : The most common complaint was menorrhagia (17 cases, 28.33%) followed by menometrorrhagia. Abnormal findings were seen in 46 patients (76.66%). The most common abnormality was hyperplasia of endometrium (31.66%). Out of 60 patients of our study who underwent Hysteroscopy and subsequent curettage, 96.66% histopathological findings correlating with hysteroscopy. **Conclusions :** Hysteroscopy is a safe, reliable and quick procedure to evaluate the endometrial cavity in patients presented with abnormal uterine bleeding. As Hysteroscopy provides direct visualization of cervix, uterine cavity and cornual openings, it is much better than dilatation and curettage.

INTRODUCTION

Introduction: Abnormal Uterine Bleeding is one of the most common complaints of the women attending gynec OPD which requires proper endometrial cavity evaluation.

Hysteroscopy is a minimally invasive procedure that has been shown to be highly accurate in diagnosing abnormalities of the endometrial cavity, tubal ostia, and endocervical canal¹. As hysteroscopy allows direct visualization of uterine cavity and cervical canal without much aid and is safe procedure, will lead to more accurate diagnosis and specific surgical or medical treatment directed at the specific pathology and hence can be used as diagnostic procedure and will avoid the need for unnecessary major surgery.

Gimpelson and Rappold reported that hysteroscopy combined with guided biopsy was more accurate than dilatation and curettage, hysteroscopy is considered an accurate 'gold standard' in uterine cavity evaluation².

Hysteroscopy involves inserting an optic endoscope into the endometrial cavity and cervical canal via vaginal route

and along with biopsy of endometrium serves as diagnostic procedure in AUB. We correlated the findings of hysteroscopy with histological findings and decided the mode of management according to the pathology detected.

AIMS AND OBJECTIVES

- (1) To study the accuracy of hysteroscopy in evaluation of abnormal uterine bleeding.
- (2) To correlate hysteroscopic findings with histopathologic findings.

Inclusion criteria :

Premenopausal and postmenopausal patient with chief complain of menstrual abnormalities.

Exclusion criteria :

- Suspected case of pregnancy
- Lower genital tract malignancies
- Pelvic inflammatory disease
- Medical contraindication to procedure (e.g. coagulopathy, etc.)

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METHODS

The present study "Hysteroscopy for Abnormal Uterine Bleeding" is a prospective study, carried out from July 2016 to February 2018, at our institute, V.S. General Hospital, Ahmedabad. Necessary institutional approvals were taken before initiating the study.

During study period, we had taken randomly 60 patients of menstrual abnormalities from our gynaecology opd at V.S. General Hospital, Ahmedabad. We had taken detailed history of all these patients. All the patients in this study underwent hysteroscopy either diagnostic or in required cases operative hysteroscopy followed by curettage and the material was sent for histological examination.

Necessary routine investigation was done like Hb %, TLC, DLC, APC, blood sugar, urine – routine & micro, HIV, HbsAg, Transvaginalsonography, PAP smear and chest X-ray.

The results of hysteroscopy and endometrial histology were studied and analyzed. All patients were well informed about the study in all aspects and informed written consent was obtained.

For softening of cervix, we kept one Tablet Misoprostol (200 ug) per vaginally, 3 hour prior to procedure. A 4mm 30 degree hysteroscope with normal saline as the distension medium was used for all procedures and in case of myoma or polyp resection glycine was used with monopolar resectoscope. Hysteroscopy was performed under sterile conditions. In this study, hysteroscopy was performed under general anesthesia and taken specimen was sent for histopathological examination.

RESULTS AND DISCUSSION

In this present study, panoramic hysteroscopy was performed in 60 patients using hysteroscope in patients who presented with complaint of abnormal uterine bleeding (AUB) followed by curettage. The curetted material was sent for histopathological analysis.

Table : 1 Age Distribution

Age Group	No of Patients	Percentage
20 – 29	08	13.33%
30 -39	21	35%
40 – 49	28	46.66%
50 – 59	03	5%
Total	60	100%

In the present study, maximum age incidence was between 40 to 49 i.e. 28 patients (46.66%). The youngest patient in the study was 25 years old and the eldest was 55 years old. Panda found that maximum incidence was

between 35-45 years in range between 25-70 years⁴. In Gianninoto's series, age range was 38- 80 years and commonest incidence was between 30- 45 years⁵.

Table: 2 Relation To Parity

Parity	Patients With Aub
Nulliparous	08
Primiparous	21
Multiparous	28
Grand Multiparous	03
Total	60

Out of 60 patients of AUB, 36 (60%) cases were multiparous.

Table 3 : Duration of Abnormal Uterine Bleeding

Duration	No of Patients	Percentage
< 6 Months	31	51.66%
6 months – 1 year	19	31.66%
>1 year	10	16.66%
Total	60	100%

Out of 60 patients of AUB, 31 patients (51.66%) had symptoms for less than 6 months.

The most common complaint in cases with AUB was menorrhagia (16 cases, 26.66%), followed by menometrorrhagia (10 cases, 16.66%). The least common complaints were polymenorrhoea and hypomenorrhoea. Menorrhagia as the primary indication for hysteroscopy was reported in 49.6% by Sciarra and Valle and 37.5% by Hamou while postmenopausal bleeding (43.7%) and abnormal perimenopausal uterine bleeding (56.3%) are the main indications in the study of Pasqualotto et al^{6,7,8}.

Of all women with a normal sized uteri, majority presented with oligomenorrhoea or hypomenorrhoea, while those having bigger uteri always presented with some pattern of increased bleeding.

Table 4: Findings At Hysteroscopy And Histopathology

Findings	No of Patients	Percentage
Hyperplastic	19 (31.66%)	19 (31.66%)
Polyp	14 (23.33%)	13 (21.66%)
Fibroid	9 (15%)	9 (15%)
Atrophic	4 (6.66%)	3 (5%)
Normal	14 (18.33%)	16 (26.66%)
Total	60(100%)	60(100%)

The most common abnormality in cases with AUB was hyperplasia of endometrium (31.66%), followed by endometrial polyps (23.33%). 9 cases showed submucous myomas (15%), 4 case of endometrial atrophy (6.66%).

Table 5: Hysteroscopic Findings

Hysteroscopic Findings					
Type of Complaint	Hyperplastic	Polyp	Fibroid	Atrophic	Normal
Menorrhagia	7	6	3	0	1
Metrorrhagia	5	1	2	1	1
Menometrorrhagia	3	3	2	0	2
Polymenorrhoea	1	1	2	0	2
Oligomenorrhoea	0	0	0	2	3
Polymenorrhagia	2	3	0	0	3
Hypomenorrhoea	1	0	0	1	2
Total	19	14	9	4	14

Hysteroscopy diagnosed all cases of endometrial hyperplasia and myomas with a specificity of 100%. In the present study, hysteroscopy made a false positive diagnosis of polyp in 1 case and of endometrial atrophy in one case.

Abnormal findings were seen in 46 patients (76.66%) with abnormal uterine bleeding out of 60 cases.

The most consistent finding has been the detection of endometrial hyperplasia and submucous myomas with high accuracy using hysteroscopy.

Swati Singh in 2014 conducted a study on patients of abnormal uterine bleeding with hysteroscopy and concluded that hysteroscopy has 100% accuracy in diagnosing normal endometrium, atrophic endometrium, tubercular endometrium and endometrial polyp with sensitivity of 97.56% and specificity of 79.66%¹⁰.

Study of Clark and Yela shown that hysteroscopy had high diagnostic accuracy for detection of intrauterine pathology^{11,12}.

Out of 60 patients of our study who underwent Hysteroscopy and subsequent curettage, 58 patients had hysteroscopic findings correlate with histopathological findings.

Table 6 : Complications noted postoperatively

Complications	No of patients	Percentage (%)
Vomiting	2	3.33
Bleeding	3	5.0
Pain	4	6.66
Infection	0	0.0
Perforation	0	0.0
Pulmonary oedema	0	0.0
Hyponetremia	0	0.0

Complications among patients noted post-operatively: Vomiting: 2 cases, Bleeding: 3 cases, pain: 4 cases, Infection: 0, Perforation: 0, Pulmonary oedema: 0,

Hyponetremia: 0. Minimal to no pain has proved to be a benefit of using a thin hysteroscope for diagnostic hysteroscopy. According to a study conducted in 2000 by Frank Willem Jansen et al the hysteroscopic procedure had a very low complication rate (0.13%)¹³.

There was no procedure related mortality in this study.

CONCLUSIONS

Hysteroscopy is a safe, reliable and quick procedure to evaluate the endometrial cavity in patients presented with abnormal uterine bleeding as Hysteroscopy provides direct visualization of cervix, uterine cavity and cornual openings, it is much better than dilatation and curettage, which is blind procedure in diagnosing cervical and uterine pathology. Hysteroscopy can be used with minimal aids and with maximum patient compliance, less hospital stay and less complications with high diagnostic value. In case of normal trans vaginal sonographic findings, hysteroscopy can find subtle findings like small polyp, fibrosis, localized hyperplasia, small nodule. Hysteroscopy is diagnostic along with curative in treating pathology like polyp or submucous myomas etc. When combined with endometrial biopsy and pelvic ultrasonography, it can establish an accurate diagnosis in a majority of patients, thereby reducing the burden of hysterectomy. By demonstrating the intracavitary lesions to the patient in real time during hysteroscopy, this serves as an excellent educational tool for the patient and allows adequate counseling during the informed decision-making process.

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