

Hysteroscopy for Abnormal Uterine Bleeding

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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 at our institute from July 2015 to June 2016. 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 49 patients (81.66%). 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 biopsy and curettage. [Kruti D NJIRM 2017; 8(6):75-78]

Key Words: Hysteroscopy , Abnormal uterine bleeding , Menorrhagia

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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. The study was done with the aim of evaluating the cause in abnormal uterine bleeding. We correlated the findings of hysteroscopy with histological findings and decided the mode of management according to the pathology detected.

Methods: The present study “Hysteroscopy for Abnormal Uterine Bleeding” is a prospective study, carried out at our institute from July 2015 to June 2016. Necessary institutional approvals were taken before initiating the study.

During study period around 32683 number of patients attended the gynaecology OPD. Out of which around 7294 patients presented with menstrual abnormality. 60 cases were taken up for the study including reproductive and perimenopausal patients with chief complaint of menstrual abnormalities. 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.

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.

We also recorded menopausal status; prior cervical procedures such as loop electrosurgical excision procedure, cervical conization, or cryosurgery; preprocedural hormone use; endometrial biopsy and results; hysteroscopy indications, findings, and any reported complications; pathologic results; and additional procedures performed, if any.

A 4mm hysteroscope with normal saline as the distension medium was used for all procedures. Hysteroscopy was performed under sterile conditions. The hysteroscope produces minimal to no trauma to the cervical canal; therefore, a tenaculum and/or cervical dilation were not required. In this study, hysteroscopy was performed under general or regional anesthesia. The hysteroscopic procedure can be performed without any analgesia or anaesthesia³. Patients with severe anemia due to menorrhagia were excluded since they required immediate intensive care. Patients with infection in the pelvic region, suspected cases of pregnancy, cases with cervical carcinoma and patients with medical contraindications to any invasive procedure were excluded.

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 No: 1 Age Distribution

Age Group	No of Patients	Percentage
20 – 29	08	13.33%
30 -39	28	46.66%
40 – 49	21	35%
50 – 59	3	5%
Total	60	100%

In the present study, maximum age incidence was between 30 to 39 i.e. 28 patients (46.66%). The youngest patient in the study was 20 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 No: 2 Relation To Parity

Parity	Patients With AUB
Nulliparous	06 (10%)
Primiparous	13 (21.66%)
Multiparous	36 (60%)
Grand Multiparous	05 (8.33%)
Total	60 (100%)

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

Table No 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 No 4: Findings At Hysteroscopy And Histopathology

Findings	Hysterooscopy	Histopath
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%)
Adhesion	2 (3.33%)	-
CuT	1 (1.66%)	-
Normal	11 (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%). As the age of the patient advances, there is likely to be a greater number of patients with malignant conditions as is seen in Gianninotos's series (16.4% with carcinoma) where age ranged from 38 to 80 years⁹.

Histopathology diagnosed correctly all cases of hyperplasia (19 cases, 31.66%), submucous myoma (9 cases, 15%). One cases of polyp and endometrial

atrophy each were diagnosed on hysteroscopy were diagnosed as normal in histopathology.

diagnosis of polyp in 1 case and of endometrial atrophy in one case.

Hysteroscopy diagnosed all cases of endometrial hyperplasia and myomas with a specificity of 100%. In the present study, hysteroscopy made a false positive

Abnormal findings were seen in 49 patients (81.66%) with abnormal uterine bleeding out of 60 cases.

Table No 5: Hysteroscopic Findings versus Type of Complaints

Type of Complaint	Hysteroscopic Finding						
	Hyperplastic	Polyp	Adhesions	Fibroid	CuT	Atrophic	Normal
Menorrhagia	7	6	0	3	1	0	0
Metrorrhagia	5	1	0	2	0	1	1
Menometrorrhagia	3	3	1	2	0	0	1
Polymenorrhoea	1	1	0	2	0	0	2
Oligomenorrhoea	0	0	1	0	0	2	2
Polymenorrhagia	2	3	0	0	0	0	3
Hypomenorrhoea	1	0	0	0	0	1	2
Total	19	14	2	9	1	4	11

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, 59 patients had histopathological findings correlating with hysteroscopy.

Complications among patients noted post-operatively: Vomiting: 2 cases, Bleeding: 3 cases, pain: 4 cases, Infection: 0, Perforation: 0. Minimal to no pain has proved to be a benefit of using a thin hysteroscope for diagnostic hysteroscopy. Failure rates associated with hysteroscopy are due predominantly to pain¹. 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 biopsy and curettage, which are blind procedure in diagnosing cervical and uterine pathology. Hysteroscopy can be used in outpatient basis with minimal aids and with maximum patient compliance, less hospital stay and less complications with high diagnostic value. In the presence of normal findings, major pathology is not likely to be missed with hysteroscopy because of its high accuracy as demonstrated by this study. 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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