DOI: 10.36347/sjams.2017.v05i02.008

Scholars Journal of Applied Medical Sciences (SJAMS) **ISSN 2320-6691 (Online)**
Sch. J. App. Med. Sci., 2017; 5(2A):344-349 **ISSN 2347-954X (Print)**

(An International Publisher for Academic and Scientific Resources)
www.saspublishers.com

Original Research Article

Role of Hysteroscopy in Abnormal Uterine Bleeding

Dr. Brinderjeet Kaur[1], Dr. Nidhi Mehta[2], Dr. S. Fayyaz[3], Dr. Megha Agrawal[4]
[1]Clinical Assistant, Department Of Obg, SDMH Jaipur
[2]Senior Resident, Dept. Of OBG, Mahila Chikitsalya, SMS Hospital Jaipur
[3]Hod, Dept. Of OBG, SDMH Jaipur
[4]Assistant Professor, Dept. Of OBG, Mahila Chikitsalya, Jaipur

***Corresponding author**
Dr. Brinderjeet Kaur
Email: drnidhimehta83@rediffmail.com

Abstract: Hysteroscopy is considered the gold standard not only for visualizing the cervical canal and the uterine cavity, but also for treating many different kinds of benign pathologies localized to that region. Present study involves evaluation of patients of abnormal uterine bleeding with hysteroscopy.as diagnostic hysteroscopy has an edge over blind endometrial sampling procedures. Aims And Objectives: (a) Hysteroscopic Evaluation of 100 cases of abnormal uterine bleeding attending gynae OPD of SDMH JAIPUR. (b) To know the prevalence of various causes of AUB in study population. Hysteroscopy was carried out using Karl storz hysteroscope based on a 2.9 mm rod lens system, with an outer diameter corresponding to 5 mm, without any anesthesia and complete evaluation of cervix, cervical canal, endometrium, tubal ostia, cornua done and details like fibroids and polyps were noted. Endometrial cavity was then curated and curetting's sent to histopathological examination. Endometrium was classified as having a normal appearance –proliferative or secretory phase or a pathological appearance-mucous polyps, fibroids; adenomyosis, hyperplasia, neoplasia etc. By present study it is observed that hysteroscopy can be used as first step for diagnosing intrauterine pathology resulting in AUB, which is both acceptable to the patient and can be done on OPD basis.
Keywords: Hysteroscopy, AUB

INTRODUCTION:

Hysteroscopy is considered the gold standard not only for evaluation of endometrial cavity but also for diagnosing and treating many different kinds of benign pathologies localized to that region [1]. Diagnostic hysteroscopy has an edge over blind endometrial sampling procedures, as diagnosis is based on the visual examination of the cervical canal and uterine cavity. Present study involves hysteroscopic evaluation of patients of abnormal uterine bleeding. Any uterine bleeding that deviates from the normal menstrual cycle pattern of 3-7/22 – 45 days is abnormal uterine bleeding. Abnormal uterine bleeding can occur in women of all ages. AUB can be categorised in to 2 broad categories:-20% cases of AUB are due to organic causes like polyp, and myomas.80% are due to hormonal disorders like DUB. Therapeutic approach is dependent on determining the cause and type of bleeding [2]. Hysteroscopy uses a *hysteroscope*, which is a thin telescope that is inserted through the cervix into the uterus. To visualize the internal anatomy. One third of all gynaecological consultation is because of AUB. Excessive menstrual loss is a strong indication for exploring uterine cavity. The reliability of hysteroscopy approaches 100% in endometrial hyperplasia, 87.5% in high risk hyperplasia and 65.2%in low risk hyperplasia [5].

AIMS AND OBJECTIVES:

1. Evaluation of 100 the cases of abnormal uterine bleeding attending gynae OPD of SDMH JAIPUR.
2. Hysteroscopic diagnoses of cases of abnormal uterine bleeding.
3. To know the prevalence of various causes of AUB in study population.

MATERIALS AND METHODS:

Hysteroscopy uses a *hysteroscope*, which is a thin telescope that is inserted through the cervix into the uterus. It allows us to visualize the anatomy of the uterus. Diagnostic hysteroscopy and simple operative hysteroscopy can usually be done in an office setting, without any analgesia or anesthesia. More complex

operative hysteroscopy procedures are done in an operating room setting [4].

Inclusion Criteria-100 patients attending Gynae OPD in the reproductive age group and postmenopausal age group, with AUB and who do not have any of the exclusion criteria.

Exclusion Criteria-

All patients attending Gynae OPD in the reproductive and post-menopausal age group in whom hysteroscopy is not advisable as in-

- Pregnancy / Abortions / Ectopic pregnancy
- Uterine and cervical infections and PID
- Lower genital tract malignancies
- Medical contra indications to any invasive procedures
- STD's and vaginitis

Equipments for hysteroscopy

- Video monitor
- Camera
- Fibro-optic light source of xenon [adjustable], connected to the fibro-optic cord which is connected with the telescope.
- Hystero flatter – Fluid pressure is usually kept at 100-150 mm Hg, flow rate above 150ml/minute and suction pressure is usually kept at 0.1 bars.
- Telescope used in this study is 25^{O}, 4 mm telescope [8989.403]
- Hysteroscope sheaths with obturator [8911.11], outer sheath [8988.22] with outlet attachment and inner sheath [8988.03] with inlet attachment

Patient Preparation for Hysteroscopy

Hysteroscopy was carried out using Karl storz hysteroscope based on a 2.9 mm rod lens system, with an outer diameter corresponding to 5 mm, without any anesthesia. Vulval and vaginal area was cleaned with antiseptic solution. Posterior vaginal wall was retracted with Sim's speculum and anterior lip of cervix held with valsellum. Internal Os was dilated upto Hegar dilator no. 10 [if required]. To obtain a sharp clear vision, the hysteroscope was focused outside on a guage piece or any object to obtain a sharp clear vision and then inserted into cervical canal and thence into endometrial cavity.

Observations we noted about –.Cervix, cervical canal, Endometrium, Tubal ostia and cornual ends, Additional findings and their details like fibroid, polyps, synechiae, septum etc. After a thorough examination, hysteroscope was withdrawn gently. Endometrial cavity was then curetted with sharp curette and curetting were sent for histopathological examination. Following criteria was used for diagnosing endometrial abnormalities on hysteroscopy:

Normal Appearance

- Proliferative phase-Endometrium appears relatively flat, pink in color and lacks any specific vascular pattern.
- Secretary phase – Thick and polypoid endometrium with reddish hue due to increased vascularity.
- Tubal ostia look like fine translucent membrane and are only seen during early proliferative phase or when an atrophic mucosal pattern is present.

Pathological Appearance

- True mucous polys are present and persist in proliferative phase. Polyps resemble in color and vascularity to surrounding epithelium. Pseudo polyp :< 1 cm [sessile], has a structure that is identical to surrounding endometrium and only observed in the secretary phase.
- Submucous fibroid: It is firm and immobile. Endometrial covering appears atrophic, lighter in color than surrounding mucosa. A network of dilated vessels can be seen on its surface.
- Adenomyosis: These are seen best after menstruation. Entrance of diverticula can be seen. If lesions are connected with cavity and appear as dark depressions that vary in size.

4. Endometrial hyperplasia –

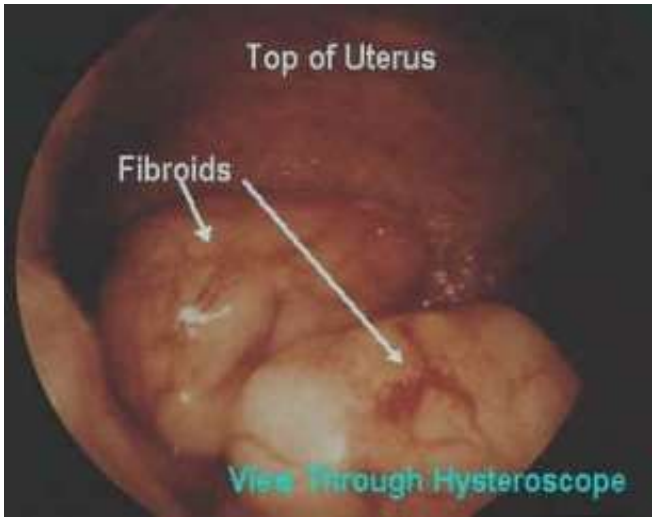
- Simple – appears as a simple increase in the thickness.
- Polypoid – can simulate polyps
- Benign cystic – glands are enlarged and dilated.
- Atypical – polypoid, nodular and papillary.
- Hysteroscopy is less praise in these conditions.

5. Endometrial neoplasia- is seen as irregular polylobular, delicate excrescences that are partly necrotic or bleeding, vascularization is also irregular or anarchic.

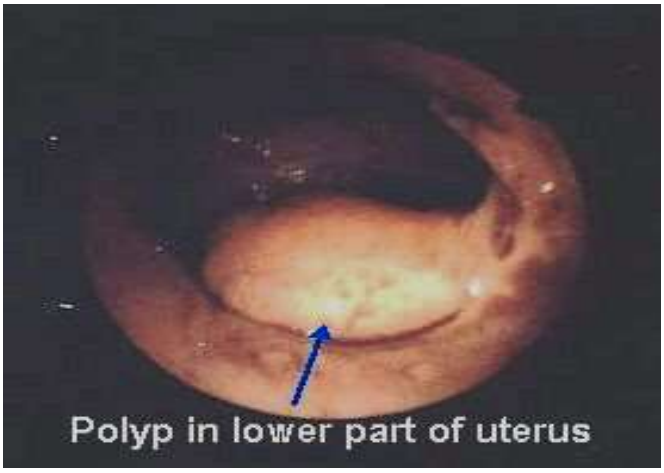
6. Uterine adhesions.

7. Septum

8. Endometrial atrophy: The hysteroscopic image is quite characteristic. Since the endometrial mucosa is quite thin, it often appears transparent, revealing the underlying vascular structures. In severe atrophy, the epithelium is smooth and whitish [4].



This is a view through a hysteroscope, during office hysteroscopy, of the inside of a uterus with two fibroids (myomas) on the back wall. The upper portion of the photograph shows the top of the uterus, which is normal. Fibroids like this can cause severe cramping (dysmenorrhea), heavy menstrual periods (menorrhagia) and bleeding between periods (metrorrhagia.) This was quickly and accurately diagnosed by hysteroscopy.



This photograph also taken during office hysteroscopy shows a polyp in the lower part of the uterus. This type of polyp often causes bleeding between periods and is easily removed in the OPD setting. Again, office hysteroscopy allowed quick and accurate diagnosis of the cause of abnormal bleeding. The polyp was removed by simple operative hysteroscopy during the same visit.

RESULT AND OBSERVATION

Table 1-Distribution of patients according to age

Age distribution	No. of patients	Percentage [%]
<20 yrs	2	2%
21-25 yrs	8	8%
26-30 yrs	8	8%
31-35	18	18%
36-40	22	22%
41-45	20	20%
46-50	14	14%
51-55	6	6%
56-60	2	2%

Table 2-Distribution of patients according to parity

Parity	No. of patients	Percentage
0	4	4%
1	6	6%
2	28	28%
3	20	20%
4	26	26%
5	12	12%
6 or more	4	4%

Table 3-Distribution according to duration of complaints

Duration in months	No. of patients	Percentage
0-6 months	22	22%
7-12 months	46	46%
13-18 months	14	14%
19-24 months	10	10%
25-30 months	4	4%
31-36 months	2	2%
37-42 months	0	0
42-48 months	2	2%
>48 months	0	0

Table 4-Distribution of patients according to nature of complaints

Nature of complaints	No. of patients	Percentage
Menorrhagia	30	30%
Metrorrhagia	10	10%
Menometrorrhagia	16	16%
Polymenorrhoea	6	6%
Oligomenorrhoea	14	14%
Polymenorrhagia	12	12%
Hypomenorrhoea	10	10%
Postmenopausal Bleeding	2	2%

Table 5-Distribution of patients according to per speculum findings

Per speculum findings	No.	Percentage
Healthy	52	52%
Hypertrophy	34	34%
Erosion	32	32%
Nabothianfollicles	6	6%
Polyp	2	2%

Table 6-Distribution of patients according to pervaginum findings

Pervaginum findings	No.	Percentage
Normal size	54	54%
Bulky	28	28%
6 to 8 weeks	4	4%
8 to 10 weeks	14	14%
more than 10 weeks	0	0

Table 7-Distribution of patients according to hysteroscopic findings

Hysteroscopic findings	No. of patients	Percentage
Hyperplastic	30	30%
Polyp	28	28%
Fibroid	16	16%
Atrophic	18	18%
Adhesion	4	4%
CuT	8	8%
Normal	26	26%

Table 8-Type of complaints versus pervaginum findings

Type of complaints	Pervaginum findings				
	Normal Size	Bulky	6 to 8 weeks	8 to 10 weeks	>10 weeks
Menorrhagia	8	14	0	8	0
Metrorrhagia	6	0	0	4	0
Menometrorrhagia	4	6	4	2	0
Polymenorrhoea	4	6	0	0	0
Oligomenorrhoea	14	2	0	0	0
Polymenorrhagia	6	0	0	0	0
Hypomenorrhoea	10	0	0	0	0
Post-menopausal bleeding	2	0	0	0	0

Table 9-Hysteroscopic findings in patients AUB versus type of complaints

Type of complaints	Hysteroscopic findings						
	Hyperplastic	Polyp	Adhesion	Fibroid	CuT	Atrophic	Normal
Menorrhagia	12	12	0	2	4	0	4
Metrorrhagia	6	2	0	6	2	2	2
Menometrorrhagia	8	6	2	4	0	0	2
Polymenorrhoea	0	0	0	0	2	0	2
Oligomenorrhoea	0	0	2	0	0	12	4
Polymenorrhagia	2	6	0	0	0	0	6
Hypomenorrhoea	2	0	0	0	0	4	6
Post-menopausal bleeding	0	2	0	2	0	0	0

1. The study was done to assess whether hysteroscopy can be used for the diagnosis of abnormal uterine bleeding.
2. 100 women with complaints of abnormal uterine bleeding were selected from outpatient department of Gynecology, SDMH JAIPUR
3. The age group of patients varied from 19years to 60 years and mean age of subjects was 39.74years.
4. Maximum no. of patients belonged to group with parity 2. Mean parity of subjects was 3.1
5. Maximum no. of patients in our study reported with-in 7-12 months of onset of complaints and mean duration of complaints with abnormal uterine bleeding was 12.5 months.
6. Most of our patients presented with menorrhagia [30% cases] followed by menometrorrhagia (16% cases) and these were the most frequent indications carrying out hysteroscopy.
7. Patients with excessive bleeding disorders presented earlier as compared to scanty bleeding disorders.
8. There were only two patients of postmenopausal bleeding.
9. Most of the patients with abnormal uterine bleeding had healthy cervix (52%).
10. Cervical Hypertrophy was the most common pathology found in 34% cases.
11. On Hysteroscopy, 74% cases had uterine pathology. Intrauterine pathology included fibroid in 16% cases, polyps in 28 % cases, adhesions in 4%cases, hyperplastic endometrium in 30%cases and atrophic endometrium in 18% cases, CuT in 8 % cases.
12. In present study hysteroscopic examination provided more accurate diagnosis in patients having normal to 12 weeks size uterus associated with fibroid, polyps, endometrial hyperplasia, adhesions and atrophic endometrium.

CONCLUSION

Hysteroscopy combined with histopathologic examination is 'Gold standard' for intrauterine cavity evaluation. By present study it is observed that hysteroscopy can be used as first step for diagnosing intrauterine pathology resulting in AUB, which is both acceptable to the patient and can be done on OPD basis. Its diagnostic value for exclusion of intrauterine abnormalities is comparable to other viable modalities and thus it is recommended that hysteroscopy should be first stage investigation for patients of abnormal uterine bleeding.

REFERENCES

1. Stefano Bettocchi, Luigi Nappi, Oronzo Ceci, Luigi Selvaggi; office hysteroscopy; Obstet Gynecol Clin North Am 2004 Sep;31(3):641-54.
2. MM Mahmud ; Medical journal of Babylon vol 10.3.

3. Riaz S, Ibrar F, Dawood NS, Jabeen A. Endometrial pathology by endometrial curettage in menorrhagia in premenopausal age group. J Ayub Med Coll Abbottabad. 2010 Jul; 22(3):161-4.
4. Available at: rcog.org/global assets/documents/guidelines/gtg59hysteroscopy.pdf
5. Mencaglia L, Perino A, Hamou J. Hysteroscopy in perimenopausal and postmenopausal women with abnormal uterine bleeding. The Journal of reproductive medicine. 1987 Aug; 32(8):577-82.