

# Out-Patient Diagnostic Hysteroscopy

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A prospective study of Diagnostic Hysteroscopy performed on day care basis in 100 consecutive women with abnormal uterine bleeding. To evaluate the suitability, efficacy and safety of Out Patient Diagnostic Hysteroscopy for investigation of abnormal uterine bleeding with special reference to need of anaesthesia. Procedure was done without anaesthesia in 77 cases while cervical block was required in 15 cases. Only 8 cases needed General anaesthesia 60 (60%) patients experienced minimal discomfort to mild pain. Only 3 patients experienced transient vasovagal attacks. No complications was related to the use general anaesthesia or cervical block uterine perforation occurred in one case. Hysteroscopic findings were normal in almost half of the cases thus avoiding need for diagnostic curettage. Rest showed various kind of pathologies. Hysteroscopy was incomplete and inconclusive in 8 cases due to bleeding obscuring vision. No patient needed subsequent hospitalization. Subjective assessment of degree of pain experienced during Hysteroscopy was noted. Pulse and B.P. was monitored throughout the procedure. Hysteroscopic findings and its various complications were also noted. Diagnostic Hysteroscopy can be done on out door basis with high acceptance rate in our patients. Anaesthesia can be used in cases of extreme anxiety, pain and cervical stenosis. In view of its safety, diagnostic accuracy and patient acceptability, introduction of out door Diagnostic Hysteroscopy into more units should be encouraged. It should be considered a procedure of choice for evaluation of cases of abnormal uterine bleeding as an adjunct to curettage.

**Key Words:** Hysteroscopy, abnormal uterine bleeding, patient acceptance, anaesthesia.

Abnormal uterine bleeding is a common symptom in gynaecology. About 33.66% of gynaecologic consultations are for abnormal uterine bleeding (Mencaglia 1986). Until recently diagnostic D&C was considered the operation of choice for investigation of abnormal uterine bleeding. This procedure required a general anaesthesia in most of the cases. Apart from risk of general anaesthesia, the procedure is expensive in term of hospital and theatre resources. D&C is a blind procedure with diagnostic failure rate of 10-25% (Grimes 1982). It usually fails to detect small or focal lesions like submucous fibroids or polyps (Lewis 1988). Its use is also associated with serious complications like uterine perforation, sepsis intrauterine Synechiaie formation (De Jong 1990). With the advent of fine diameter of endoscope along with strong fibreoptic light allow the procedure to be done without any form of anaesthesia and minimum or no cervical dilatation (Mencaglia 1987). Comparative study has shown Hysteroscopy to be a better alternative with direct inspection of endometrial cavity and guided biopsy (Gimpelson and Rappold 1988) and better diagnostic yield at minimum cost. The technique can be learned by most gynaecologist with some additional training and experience (Lindemann). To evaluate the suitability, efficacy and safety of out patient diagnostic Hysteroscopy for the investigations of AUB with special reference to need for anaesthesia an analysis for 100 cases is presented.

## Material and method

The hundred consecutive women presenting in gynaecology out door with AUB including PMB who were considered to need Diagnostic Hysteroscopy were included in this study.

Initial clinical workup was done at their first out door visit by the attending consultant and need for Hysteroscopy was determined. They were then called on empty stomach on the Day of Hysteroscopy. Procedure was briefly explained to the patient and she was reassured. Informed verbal consent was taken. No premeditation was used.

Hysteroscopy was carried out with 4 mm Hamou 1 microhysteroscope with 30° for oblique lens, uterine cavity was distended with CO<sub>2</sub> via Hamou microhysteroscoper and illumination was provided by a high intensity cold light source (250 W) via fibre optic lead (all instruments manufactured by Karl Storz GmbH Germany). Hysteroscopy was introduced under vision without cervical dilatation. Cervical dilatation was done only in cases where difficulty was encountered in introduction of Hysteroscopy due to cervical stenosis. The procedure was terminated in favour of G.A. in cases experiencing intolerable pain, anxiety, nervous or when severe cervical stenosis exists. In other cases the need for anaesthesia was left to the discretion of patient. Cervical block was used in cases where patient was unwilling to continue procedure because of severe pain.

The level of discomfort of pain experienced during the examination was matched to one of the following five categories.

1. P1 (Intolerable pain): Procedure terminated in favour of general anaesthesia.
2. P2 (Severe Pain): Cervical block used
3. P3/moderate pain Like menstrual clamps
4. P4(mild pain) acceptable discomfort
5. P5(minimal discomfort) easily acceptable

The patient was also interviewed after the procedure to know how acceptable was the procedure in this setup.

**Results**

Results are described below in a tabulated form. Patient's characteristics are shown in Table 1.

Table 1: Patient's characteristics

No. of patients	100		
Age (Median)	41 Year	Range(22-60 Years)	
Gravity	6	1-11	
Parity	5	1010	
Duration of symptoms	2 years	20 days-8 years	

A total 100 women included in this prospective study, 91 patients were premenopausal and 9 were postmenopausal. Reason for including patients with abnormal uterine bleeding was that it is the most common gynaecological disorder met and benefited from Hysteroscopy thus

Table 3. Hysteroscopic findings with reference to patterns of AUB

Bleeding Patterns	n	Normal	Submenus Fibroid	Endometrial Polyp	Endometrial hyperplasia	Endometrial atrophy	Malignanc y	Incomplete
Menorrhagia	39	19	8	5	5	-	-	2
Metrorrhagia	24	8	6	3	2	1	1	3
Polymenorrhagia	17	12	2	1	-	-	-	2
Intermen strual or P.C. bleeding	10	6	2	2	-	-	-	-
Postmenopausal	10	1	-	2	1	3	2	1
Total	100	46	18	13	8	4	3	8

Table 4. Hystopathology in 46 cases

Histopathology	n=
Proliferative endometrium	9
Secretory endometrium	6
Benign polyps	15
Endometrial atrophy	3
Decidual reaction	3
Simple endometrial hyperplasia	5
Atypical hyperplasia	2
Endometrial carcinoma	3

Table 5. Complications and failure of hysteroscopy

Complication	n=
Transient vasovagal attack	3
Uterine perforation	1
Incomplete procedure	8

Table 6. Need for GA

Need for GA	n=
Severe anxiety	3
Severe cervical stenosis	3
Intolerable pain	2
Total	8

Majority of our patients tolerated the procedure very well without anaesthesia. General anaesthesia was needed in 8 cases, 3 cases due to severe anxiety, 3 cases due cervical stenosis and in 2 cases due to intolerable pain (Given in table 7). Hysteroscopy was incomplete in 8 cases due to bleeding obscuring vision and simple curettage was done. 3 patients experienced transient vasovagal attacks in

avoiding the need for unnecessary curettage.

Table 2: Subjective assessment of degree of pain experienced during hysteroscopy

Category of pain/Discomfort	No.
1	P1 08
2	P2 15
3	P3 11
4	P4 21
5	P5 45

Hysteroscopic findings are detailed in table 4. Endometrial curettage was needed in 46 cases. Their histopathology given in table 5. In rest of cases D&C was avoided due to normal hysteroscopic findings. 3 cases of adenocarcinoma diagnosed on Hysteroscopy were confirmed on histopathology.\

among cases where no form of anaesthesia was used. Uterus was perforated in one case, and patient was kept under observation and discharged in the evening. No anaesthesia related complication occurred. No patient needed subsequent hospitalization. All patients felt happy and satisfied.

**Discussion**

Our study clearly shows that diagnostic Hysteroscopy is essentially an out door procedure with good patient compliance. In majority of cases there is no need of any kind of anaesthesia. Taylor and Hamou (1983) has reported a series of 959 hysteroscopies without any form of anaesthesia Neagle et al (1996) has similarly reported successful experience of 2500 out patient Diagnostic Hysteroscopies. Majority of our patient tolerated the procedure very well. Patient reassurance and briefing the procedure is benefiting.

We use local anaesthesia in 15 cases and general anaesthesia in 8 cases. Anaesthesia can be used in selected patients where cervical stenosis is suspected, when patient reports a high degree of pain in previous intrauterine procedures and in very anxious patients to prevent vagal reactions. According to Zupie et al (1995) the use of local anaesthesia in the form of paracervical infiltration is a traumatic procedure which causes pain and risk of anaesthetic intravasation and suggested the use of topical endometrial anaesthesia by injecting local anaesthesia into uterine cavity for Hysteroscopy and endometrial biopsy. Recently cicinelli et al (1997) has also reported the use of topical endometrial anaesthesia and said that pain at

Hysteroscopy depends upon cervical ostium dilatation and uterine cavity distension and transcervical instillation of anaesthetic into uterine cavity is able to block nerve ending at cervical internal ostium thus preventing start of vagal reflexes and attenuate pain experienced at Hysteroscopy and endometrial biopsy. In new future we will be able to select best anaesthesia, its concentration, the lowest effective quantity and best route.

In the light of our experienced and various studies it is concluded that Hysteroscopy is essentially an indoor procedure with good patient compliance.

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