Office Hysteroscopy : An Insight

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Abstract

In clinical gynaecology, one comes across a large number of patients with intra-uterine pathology. Various investigations have been devised to evaluate these disorders. Hysteroscopy, since its advent has progressed a long way to be recognized as the gold standard in diagnosing intra-uterine pathologies. An attempt to make it an OPD procedure was encouraging. 100 cases of office hysteroscopy were performed at our centre. Pain, patient comfort and acceptability were studied. A favourable outcome was achieved and wider application is recommended.

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Introduction

Abnormal uterine bleeding and infertility pose a common problem for the practising gynaecologist. Different investigations have been devised to evaluate the same. Hysteroscopy has come to play an important place among these investigations. Although hysteroscopy has evolved during the last half of the century, its use in the office setting was not made practical until the early 1980s with the introduction of the small caliber scopes of less than 5 mm outer diameter. Hysteroscopy has now become a standard part of the gynaecologic surgeon's armamentarium and is now routinely taught as part of residency curricula and contemporary postgraduate seminars.

Material and Methods

A prospective study of 100 cases of hysteroscopy was carried out to study the acceptability of this investigation as an outpatient procedure. The common indications were -

1. Abnormal uterine bleeding
2. Infertility
3. Foreign bodies

Cases were routinely picked up from the OPD and depending on the indication, were subjected to hysteroscopy. A complete medical history, physical examination including a pelvic examination and a pregnancy test when appropriate, preceded the hysteroscopy. No pre-procedure medication was administered. Any contraindication to hysteroscopy, like pregnancy, cervical infection, profuse uterine bleeding or suspected cervical malignancy was excluded. We avoided the use of any local anaesthesia/analgesia/premedication and also did a pain grading to analyse the acceptability of hysteroscopy as an office procedure. Patient rating of the pain associated with hysteroscopy was studied with the help of a visual analogue scale from 1 to 10. The intelligent patients were asked to classify their experience of pain as shown in Table 2.

Instruments used were as follows :

Hysteroscope : Karl Storz 4 mm scope with 5 mm sheath

with a fore-oblique lens of 30°. Distension media : Ringer lactate, Camera : Karl Storz telecam - II camera was used which was connected to the monitor via a VCR, which helped us record interesting cases. Insufflation apparatus with manometer. A standard hysteroscopy tray with vaginal speculum, volsellum, uterine sound and graduated cervical dilators were used.

Disinfection and maintenance of instruments:

Although the metallic sheaths and ancillary instruments of the hysteroscope can be autoclaved for sterilisation, the telescope was not designed for the same. 5% glutaraldehyde (Cidex) was used for sterilization of the scope.

After the decision and patient selection for office hysteroscopy, the patient was given information that sufficiently explained what hysteroscopy is, the objectives of performing the procedure and expected results. The patient was then asked to empty her bladder.

With the patient in dorsal position and after a pelvic examination, the vulvar area and vagina were cleaned with an appropriate antiseptic solution. No surgical draping was required. The cervix was visualized with the aid of a vaginal speculum. The cervix was grasped with a volsellum and was gradually dilated upto 5 mm after uterine sounding. The hysteroscope was then attached to its light source and distending medium. The camera was then attached. Insufflation was begun at this point and the flow of the distension media through the hysteroscope checked. By gradual manipulation, the endoscope was advanced slowly, following the small cavity seen in front of the scope. The cervical canal was visualized in its totality and once the junction between the cervix and the uterus was passed, the uterine cavity was observed systematically : anterior wall, lateral walls, posterior wall and uterine cornua. After the procedure, the patient was instructed on what to expect in the following few hours; this often included slight cramping and spotting. She was advised to call the office if unusual pain, bleeding, or fever occurred.

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Results

Abnormal uterine bleeding formed the bulk of the cases investigated, followed by infertility and foreign bodies. The same is depicted in Table 1.

Table 1

Indication	
Indications	Total No
Abnormal uterine bleeding	76
Infertility	22
Foreign bodies	02

Pain rating :

In our study of 100 cases, there were no cases where the procedure had to be abandoned due to pain. There was however, a solitary case who developed vomiting during the procedure. Another had a vaso-vagal attack. Both responded favourably to symptomatic treatment.

One patient reported the same evening to the hospital with features suggestive of acute pelvic inflammatory disease (PID). She had lower abdominal pain which was moderate in intensity. There was no fever or tachycardia. On history, she revealed that she had similar problems after she was subjected to hysterosalpingography (HSG). She was managed conservatively and response was satisfactory. The patient was discharged 24 hours after reporting. The scores obtained at the end of the study are summarized in Table 2. The average pain score obtained was 3.86/10. The pain scores in relation to different criteria were also studied under the following heads :

Table 2

Pain score

Level of discomfort/pain	Score	Total No
Minimal discomfort	2	32
Acceptable discomfort	4	44
Tolerable pain	6	23
Barely tolerable pain	8	01
Pain not tolerable	10	00

Average pain score : 3.86

Age : The younger patients showed a better pain tolerance than their older counterparts. The findings are summarized in Table 3.

Table 3

Pain score-age wise

Age group	No of cases	Average pain
Below 25	12	2.66
26-35	16	3.0
36-45	37	4.22
Above 45	35	4.28

lowed by abnormal uterine bleeding and infertility, possibly indicating the higher motivation levels in an infertile lady (Table 4).

Table 4

Pain score-indication wise

Indication	No of cases	Average pain
Abnormal uterine bleeding	76	4.02
Infertility	22	3.18
Foreign bodies	02	5.00

Socio-economic status : Socio-economic status made little difference to the pain score (Table 5).

Table 5

Pain score socio-economic status wise

Socio-economic status	Total No	Average pain
High	03	3.22
Middle	21	3.52
Low	76	3.96

We also classified the various possible aetiologies that led to various presentations. Cases investigated for abnormal uterine bleeding : Total 76. Among the cases investigated for abnormal uterine bleeding, most returned normal findings (44.7%). Fibroids and polyps were found in 22.4% and 14.5% respectively. 7.9% revealed hyperplastic endometrium and findings suggestive of adenomyosis each. 2.6% had uterine abnormalities in the form of septate uterus (Table 6).

Table 6

Findings in cases investigated for abnormal uterine bleeding

Hysteroscopic findings	Total No	%
Normal findings	34	44.7
Polyps	11	14.5
Hyperplastic endometrium	06	7.9
Adenomyosis	06	7.9
Sub-mucous fibroid	17	22.4
Uterine abnormalities	02	2.6

Cases investigated for infertility : Total 22

Mainly patients underwent hysteroscopy as a workup for in vitro fertilisation (IVF). 19 out of the 22 cases studied had a normal study while the remaining 3 showed features of Ashermann's syndrome.

Cases investigated for foreign bodies : Total 2

One case revealed the tip of a broken Karmann's canula and the other revealed a missing Cu-T.

Discussion

The experience of pain is composed of sensory.

been considered an important determinant in the expression of pain, and it is also this complicated interaction that makes the study of pain response difficult. We used this procedure as an outpatient investigation and hence performed it without analgesia or anaesthesia. The results were encouraging and corresponded to most of the studies conducted earlier. We had an average pain score of 3.86/10 which is in tandem with other studies carried out by various institutes.

WC Lau et al had reported a pain score of 4.2/10 in the placebo [1]. A standard 5 mm rigid hysteroscope with CO₂ as distension media was used. Wong et al reported a pain score of 1.58/5 with the use of 4 mm rigid scope and CO₂ as distension media [2]. In a comparative study between hysteroscopy using a flexible scope and saline infusion sonography, Wildrich et al reported a similar pain score [3]. Lau et al further confirmed our results in a different study [4]. A maximum pain score of 4.2/10 was achieved using a 5 mm rigid scope and CO₂ as distension media. Downes and Al-Azzawi also reported that office hysteroscopy was well accepted and tolerated by patients with a mean score of 3.25/10 for pain experienced during the procedure [5]. Tahir et al averaged a pain score of 3.5/10 using a 4 mm scope with saline as distension medium [6]. Patients involved in a study by Towbin et al expressed little discomfort to office hysteroscopy [7].

Despite the use of a rigid scope and a cheaper distension media, comparable results were achieved proving that a procedure, which was more economical, could be employed with equal efficacy. Whether outpatient hysteroscopy should be performed under local anaesthesia is still controversial. Vercellini et al failed to show a reduction in pain during outpatient hysteroscopy despite the use of paracervical anaesthesia in a

group of premenopausal women [8]. The risks of local anaesthesia for a procedure associated with such a low pain index would seem unjustified. The percentage of intra-uterine lesions in our study also corresponded to studies carried out earlier [4].

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6 year old girl to her friends - mummy, papa, teacher always seem to be complaining, moaning.
Her friend - That's why they are called groan-ups.

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I know a guy who went on diet. His torso got smaller, his face became thinner and he became narrow-minded.

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