



Outpatient Hysteroscopy in Management of Peri & Postmenopausal Women

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Abstract

Hysteroscopy is the gold standard for the assessment of uterine cavity in cases of abnormal uterine bleeding, infertility, recurrent spontaneous pregnancy losses and other suspicious pathologies involving the uterine cavity. Outpatient also known as office or ambulatory hysteroscopy makes the procedure more acceptable for patients and it can also be used as a treatment modality in submucosal myomas, polyps, retained products, and removal of lost intrauterine devices. These indications are commonly seen amongst peri and post-menopausal women.

Current study was aimed at comparing the level of pain and discomfort experienced by the patients and to investigate the factors contributing towards that pain and the hysteroscopic outcomes of postmenopausal and perimenopausal women undergoing hysteroscopy in the outpatient hysteroscopy clinic at the Colombo South Teaching Hospital. Another objective was to identify the incidence of post-menopausal and heavy menstrual bleeding. Furthermore, this study was conducted to investigate the usage of speculum during hysteroscopy and to identify the incidence of usage of speculum for above mentioned two women groups. This study also aimed to compare the level of pain and discomfort experienced while obtaining biopsy with the age of the women.

67.9% of the perimenopausal women had a pain score less than 2 and more than 60.7% of postmenopausal women had a pain score less than 2 and hence majority were willing to recommend the procedure to other people. There was no correlation of pain with past obstetric history or parity. Endometrial polyps were the most common abnormal outcome among perimenopausal group while it was atrophic endometrium among postmenopausal group. Outpatient hysteroscopy is well tolerated and accepted among both perimenopausal and postmenopausal women in local setting.

Key words: Office hysteroscopy, Perimenopause

Introduction and Objectives

Hysteroscopy has become the gold standard for the assessment of intra-cavitary pathology in patients presenting with abnormal uterine bleeding,



suspected endometrial cancer as well as subfertility.¹ Furthermore, preoperative evaluations and minor surgical procedures can be done by using office hysteroscopy.² Technical and technological advancement in Gynaecology has made hysteroscopy less invasive allowing it to be performed in an ambulatory setting.³ Less pain encountered by patients during and after the procedure, and the convenience of having it performed as an office procedure serve to augment its value.⁴ Outpatient hysteroscopy procedure has allowed doctors to attain more reliable results regarding the diagnosis of pathologies.⁵ Moreover, outpatient hysteroscopy has advantages over inpatient hysteroscopy such as reduced anesthetic risk⁶, lower cost, patient preference and increased patient satisfaction.⁷⁻⁹ A previous study has demonstrated that prior patient education by a medical staff member reduces the anxiety level.¹⁰ Therefore, counseling the women before the procedure is important to reduce the patient's anxiety.¹¹ Pharmacological and non-pharmacological interventions (including music) can be used to reduce the anxiety and the pain.¹²⁻¹⁴

However, outpatient hysteroscopy services are not well established in South Asian countries due to several factors such as pain, low patient tolerance⁷, vasovagal episodes and initial cost associated with establishing a unit² etc. The pain and the discomfort may be associated with the insertion of the speculum into the vagina, insertion of the hysteroscope through the cervical canal and grasping and traction of the cervix by the tenaculum. Several previous studies have shown that as many as 99.1% of the patients have reported no discomfort related to the hysteroscopic procedure once the usage of speculum and the tenaculum was eliminated.^{15,16} The technique has come a long way with combination of ultrasound and this enhanced facility allows visualization of macroscopic or focal anomalies suggestive of endometrial hyperplasia inside the womb, and targeted hysteroscopic biopsy (THB) withdrawal under direct vision.¹⁷ Regardless, the assessment of perimenopausal and postmenopausal bleeding is still commonly done by dilatation and curettage under anaesthesia.

Pain should be measured to improve the quality of pain management. In the current study, Visual Analog Scale (VAS) is used to measure the intensity of pain. VAS is easy to use in various practical settings.¹⁸

In several studies, hysteroscopy has proven to be highly accurate in the diagnosis of intrauterine pathology.^{19,20} Moreover, findings of outpatient hysteroscopy correlated well with those of inpatient hysteroscopy with advantages such as reduced time, cost and risks associated with anaesthesia.²¹ Some reports indicate, even more complicated operative procedures may be performed by using office hysteroscopy with a high level of patient satisfaction.²²

Moreover, there are many clinical and economic advantages of outpatient hysteroscopy, it is essential to confirm that women have a positive attitude with the hysteroscopy procedure.

The main purpose of our Gynaecology Professorial Unit has always been to reduce the level of pelvic pain or discomfort felt by the patient during office hysteroscopy in order to make this procedure acceptable and well tolerated; our study is aimed to compare the level of pain and discomfort experienced by postmenopausal and perimenopausal women undergoing hysteroscopy and to investigate the association between parity, gravidity, children and the level of pain experienced by the women undergoing hysteroscopy. Moreover, another objective of this study is to identify the incidence of postmenopausal bleeding and heavy menstrual bleeding among the postmenopausal and perimenopausal groups of women respectively who undergo hysteroscopy and to evaluate the incidence of findings of hysteroscopy within the postmenopausal group. Furthermore, this study is conducted to investigate the association between the level of pain experienced by women undergoing hysteroscopy and the usage of speculum during the procedure and to identify the incidence of usage of speculum for above mentioned two groups of women. This study also aims to compare the association of the level of pain and discomfort experi-



enced while obtaining the biopsy with the age of the women (above 50 and below 50).

Methodology

This was a prospective descriptive study conducted among 325 patients with postmenopausal or perimenopausal heavy menstrual bleeding presenting to CSTH for Office Hysteroscopy from June 2018 to September 2021. A questionnaire with patient's history, indications and findings was filled immediately following each procedure by the operator using a visual analogue scale to gauge the level of pain experienced by the patient.

All the results were analyzed using SPSSv21 software.

Results

Among the study population, 106/325 (32.6%) were postmenopausal patients (age 50 or above 50) and 219/325 (67.4%) were perimenopausal women (below 50). Of the postmenopausal women, 18 (17%) patients experienced no pain, and 72 (67.9%) patients reported a pain score of less than 2. Of the perimenopausal patients (age below 50), 18 (10.3%) women experienced no pain and 133 (60.7%) reported a pain score of less than 2. Only 1 (0.94%) postmenopausal patient had a pain score of 10 while 2 (0.91%) of perimenopausal women had a pain score of 10 (Figure 1).

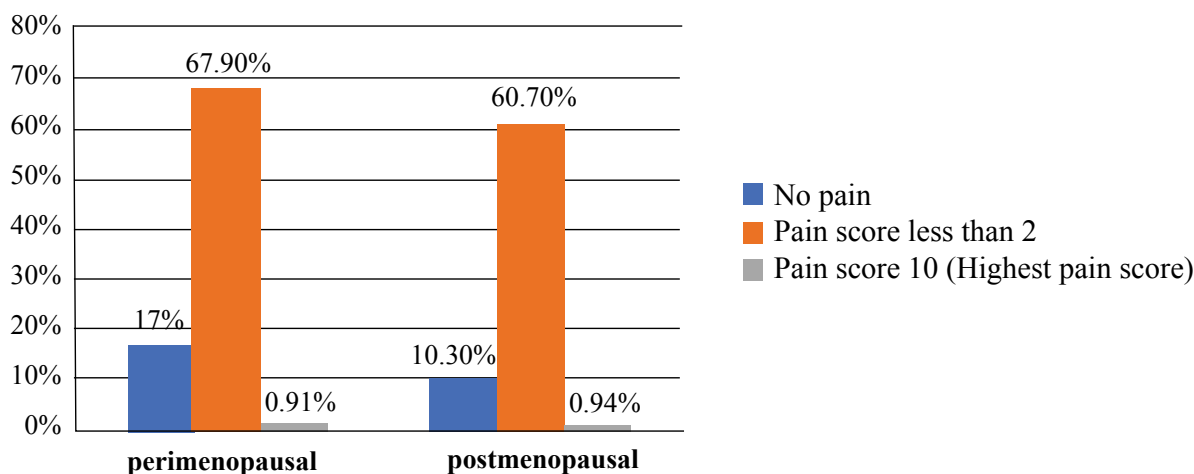


Fig 1. Comparison of the pain score between perimenopausal and postmenopausal study groups

There were no significant differences observed indicating a lack of association of Gravida, Parity and Children with the level of pain experienced during the procedure (Respective P values 0.30, 0.32, 0.22).

Among the group of perimenopausal women, 61.9% presented with a complaint of heavy menstrual bleeding. Among the group of postmenopausal women, 41.2% presented with a complaint of post-menopausal bleeding.

22.7% women had normal endometrial appearance, 14.4% had single polypoids while 20.6% were polypoid within postmenopausal women

group. Moreover, 22.7% had an atrophic endometrium while 4.2% had a malignant looking endometrial appearance (Figure 2). Among perimenopausal women, 29.4% women had normal endometrial appearance, 17.4% had single polyps while 22.1% were having polypoids. Furthermore, within the perimenopausal group of women, 3.1% were with atrophic endometrium while 1% had malignant looking endometrium (Figure 2)

The frequency of using speculum was 20.11% among perimenopausal group while it was 11.70% among the postmenopausal group (Figure 3). There was a significant association between the level of pain experienced by the women undergoing hysteroscopy and the usage of speculum during the procedure (P value=0.002). 17 patients (5.23%) had a stenosed cervical canal requiring cervical dilatation.

Out of the 219 premenopausal women, 117 patients responded to the inquiry about level of anticipated pain. 27 patients (23.1%) experienced pain more than they expected while 90 patients (76.9%) experienced pain less than expected. Similarly, 58 patients responded to the inquiry about pain from the 106 postmenopausal women and 15 patients (25.9%) experienced pain more than they expected while 43 patients (74.1%) experienced pain less than expected.

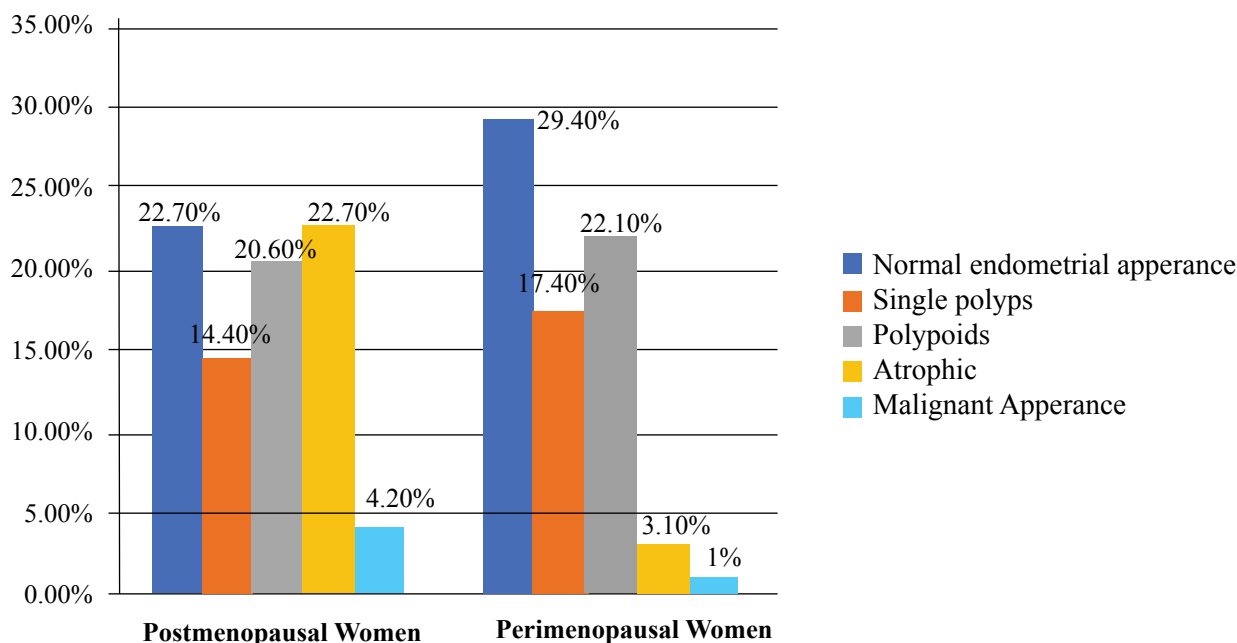


Fig 2. Hysteroscopic examination outcomes of the two study groups

There was no significant difference between level of pain and discomfort experienced while obtaining the biopsy samples, with the age of the woman (P value =0.251).

Out of the 219 premenopausal population, 127 women responded to the inquiry about recommendation of the hysteroscopy procedure to others. 72 (56.7%) of them had stated that they would

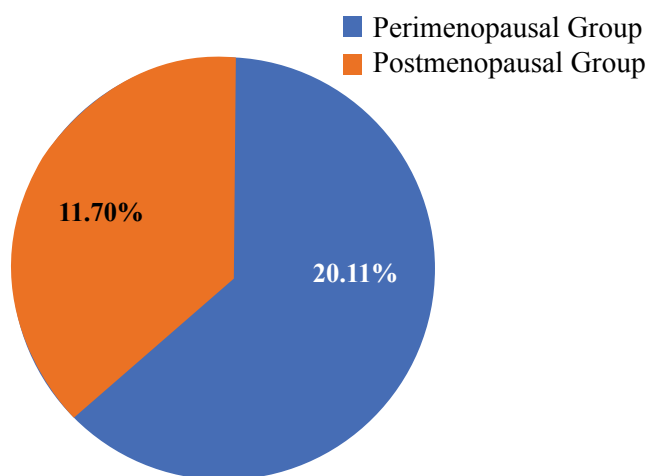


Fig 3. Usage of speculum between twi study groups ; perimenopausal and postmenopausal



not recommend this procedure to another person. And similarly, out of the 106 postmenopausal population 63 women responded to the inquiry and 34 (54%) of them stated that they would not recommend this procedure to another person.

According to the current study, both perimenopausal and postmenopausal women have experienced similar levels of pain and discomfort throughout the hysteroscopy procedure. Moreover, majority of them have experienced mini-

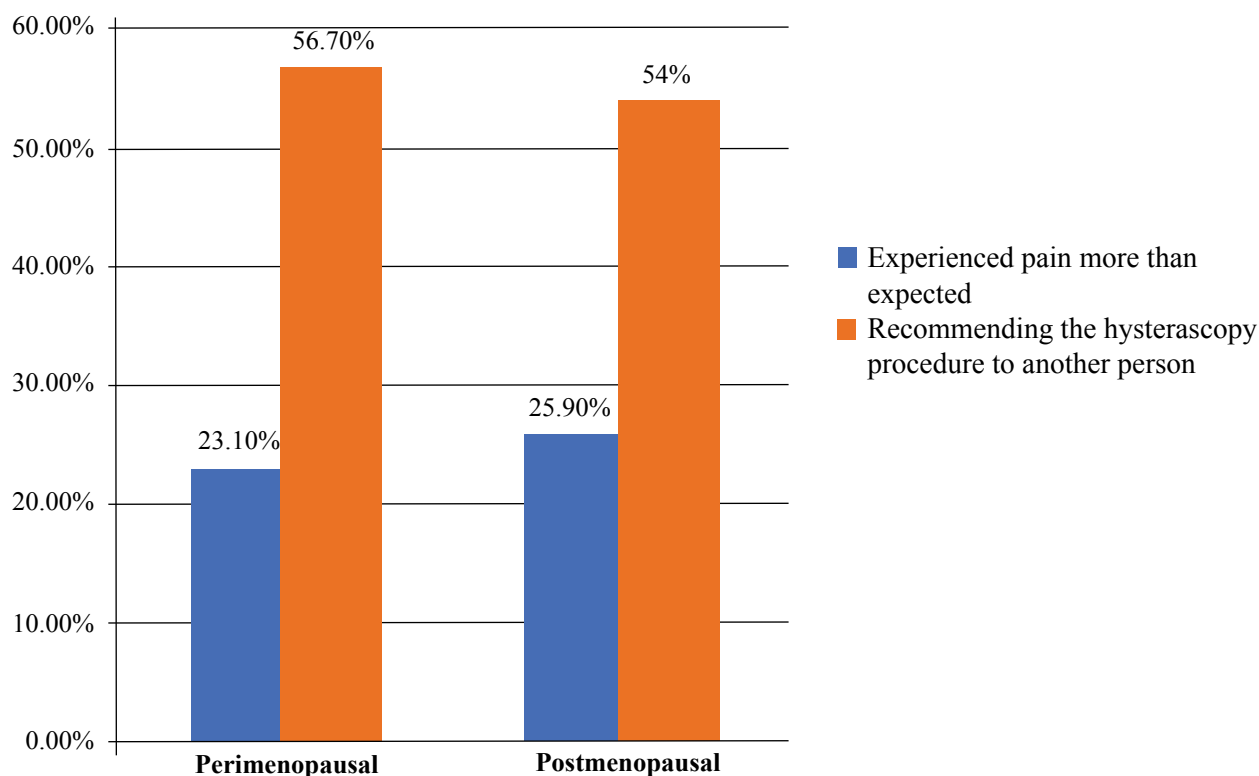


Fig 4. Assessment of patient satisfaction levels with regards to the hysteroscopy procedure between premenopausal and Postmenopausal groups

Discussion and Conclusion

Outpatient hysteroscopy has become the first-line method for the investigation of intra-cavitary pathology in both premenopausal and postmenopausal patients presenting with abnormal uterine bleeding, as well as for the assessment of infertile patients with suspected cavity abnormalities. There can be an increased demand for office hysteroscopy when patients understand that many procedures can be performed with reduced anesthetic risk, lower cost and no incision.

Of the study population, majority were perimenopausal women indicating that they are more susceptible towards conditions requiring hysteroscopy.

imum amount of pain while doing the procedure with pain score less than 2 in visual analogue scale. Similar results have been shown in previous studies indicating that office hysteroscopy is a well-tolerated procedure with low pain scores (7,23). Both perimenopausal and postmenopausal groups have experienced equal pain levels despite their age.

During the diagnostic hysteroscopy, the most common abnormality was endometrial polyps among perimenopausal women (22.10%). A previous study has reported 33.9% frequency for endometrial polyps during diagnostic hysteroscopy.²⁴ Atrophic endometrium was the most common abnormality among postmenopausal group.



Statistical analysis of the results revealed no evidence that parity, gravida and number of children influence the level of experienced pain. However, it is believed that inserting a hysteroscope is easier with high parity and increasing number of children. It is important to conduct further larger studies to confirm this observation. Cervix is more dilated in women with a history of vaginal deliveries, therefore those women have experienced shorter procedure time and less pain.¹⁵

According to the results, there is a positive trend for the necessity of using speculum with perimenopausal women than with post-menopausal women.

Moreover, the current study has shown that pain is mainly experienced with the use of speculum than without it. Therefore, it is important to use no-touch approach (direct entry with vaginoscope and hydrodistension of the cervix for dilation, while avoiding the use of speculum) to minimize the pain. Nevertheless, no-touch technique is still sometimes painful. So, identification of other risk factors for a painful procedure has to be done.

Majority of the sample population in both groups have stated that they have experienced less pain than expected. A positive response from a majority of the sample population serves to reiterate the suitability of hysteroscopy as an office procedure in postmenopausal and premenopausal women.

A safe hysteroscopy procedure is a result of good team work between a well-trained surgeon and an experienced anesthesiologist with the use of ideal fluid management.

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