

Ambulatory Hysteroscopy in Abnormal Uterine Bleeding: A Tertiary Care Hospital Perspective

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ABSTRACT

Background: To avoid delays in outpatient facilities for managing benign gynecological conditions like abnormal uterine bleeding (AUB), there is a need to evaluate usage of unconventional methods like outpatient hysteroscopy.

Objectives: To evaluate the usage of outpatient diagnostic hysteroscopy in women with abnormal uterine bleeding.

Methods: An observational study was conducted at Obstetrics and Gynecology Department of Combined Military Hospital, Kharian. The study included 56 women having AUB with or without history of failed medical treatment. The study participants underwent outpatient diagnostic hysteroscopy. Diagnostic hysteroscopy was done under local para-cervical block in the Outpatient department. Procedure indications, outcome and biopsy findings were recorded on predesigned proformas.

Results: Mean age of the study participants was 44±3.5 years. The most common indications for diagnostic hysteroscopy were postmenopausal bleeding 19(34%) and heavy menstrual bleeding 16(28%). Hysteroscopy outcomes included endometrial biopsy 19(34%), discharged with no biopsy 14(25%), further test and evaluation required 12(21%), admission due to failed outpatient procedure 11(20%). Sixty two percent of the study participants had normal biopsy findings while other biopsy findings were polyps (20%), fibroids (14%) and endometrial hyperplasia (4%). Nine percent had unsuccessful hysteroscopy due to patient refusal to proceed.

Conclusion: Outpatient hysteroscopy can be helpful in early and rapid diagnosis of women with abnormal uterine bleeding.

Key Words: Outpatient hysteroscopy, Endometrial biopsy, Abnormal uterine bleeding

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INTRODUCTION

Abnormal uterine bleeding (AUB) is one of the most common problems presenting in gynecological outpatient department (OPD). It accounts for approximately 15% of office visits and 25% of gynecological surgeries.¹ Hysteroscopy developed during the twentieth century as the gold standard for examining the endometrial cavity and the evaluation of its disorders previously evaluated with unsighted and inaccurate procedures (Dilatation and Curettage).

Hysteroscopy allows visual inspection of the uterine cavity. It is benign, practical, tolerable and expedient for the patient.

Outpatient hysteroscopy is becoming more widespread worldwide due to technological improvements in the instrumentation and development of safe economical media for uterine distension. The Royal College of Obstetrics and Gynecology released 'Green Top' guidelines, in 2011 suggesting best practice "all gynecology units should provide a dedicated outpatient hysteroscopy service to aid management of women with abnormal uterine bleeding".²

Recently a national program in the UK has been rolled out called 'Getting it Right for Time' (GIRFT).³ The main intention for this is to improve the patient outcomes and safety, especially to promote the usage of outpatient over inpatient hysteroscopy. Recently, the vaginoscopy is introduced as the regular procedure for the outpatient hysteroscopy, especially where effective insertion of a vaginal speculum is likely to be uncomfortable.⁴

Assessment and management of AUB is the most common purpose for an appointment to outpatient gynecology departments. The availability of the same-day outpatient procedure cuts the number of clinic visits with the "see and treat" tactic to identify pathology and ensure the endometrial biopsy in case of suspicion.

Outpatient hysteroscopy facilitates rapid and appropriate endometrial inspection and biopsy for further treatment. The objective of the study was to evaluate the use of outpatient hysteroscopy in the women presenting with abnormal uterine bleeding.

METHODS

An observational study was conducted at Obstetrics and Gynecology Department of Combined Military Hospital, Kharian from January to June 2022. The approval of the study was granted by the institutional ethical review committee (A/16/EC/2022). Simple convenient sampling technique was used to collect the data. Sample size was calculated by using GLIMMPSE software. Fifty-six women having AUB with or without history of failed medical treatment were selected for outpatient hysteroscopy. Women with pregnancy related AUB and lower genital tract infections were excluded from the study. Written informed consent was taken from the study participants.

The participants underwent hysteroscopy in OPD with rigid hysteroscope. After pelvic examination, para-cervical block with 20ml local anesthetic 1% Lignocaine given at 4 and 8 o' clock position and hysteroscope introduced into the uterine cavity through the cervix. Endometrial biopsy was taken in suspicious cases and sent for histopathology. Procedure indications, outcome and biopsy findings were recorded on predesigned proformas.

Statistical Analysis

Data was analyzed by SPSS version 24. Frequencies and percentages were calculated for categorical variables.

RESULTS

Mean age of the participants was 44±3.5 years. The commonest hysteroscopy referral indications included (Fig:1) postmenopausal bleeding (PMB) 19(34%), heavy menstrual bleeding 16(28%), inter-menstrual bleeding 10(18%), post coital bleeding 6(11%) and intrauterine contraceptive device 5(9%).

Endometrial Biopsy findings were normal in 35(62%), polyps were found in 11(20%), fibroids in 8(14%) and endometrial hyperplasia was seen in 2(4%) (Fig:2).

Outpatient hysteroscopy procedure outcomes were, the endometrial biopsy in 19(34%), discharged with no biopsy 14(25%), further test and evaluation required in 12(21%), admitted for inpatient due to failed outpatient procedure was 11(20%) as represented in Fig:3.

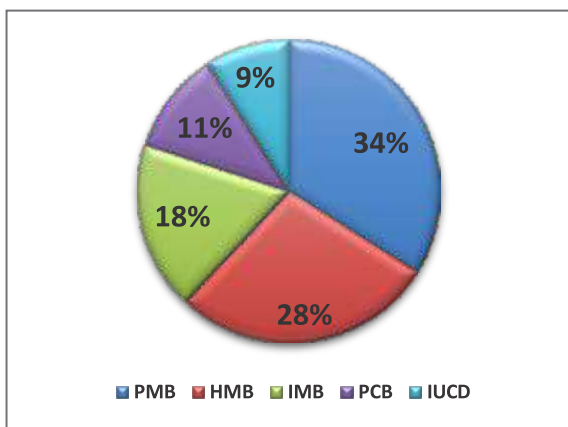


Figure 1: Indications of Hysteroscopy

PMB (postmenopausal bleeding)
 HMB (Heavy menstrual bleeding)
 IMB (Inter-menstrual bleeding)
 PCB (Post coital bleeding)
 IUCD (Intrauterine Contraceptive Device)

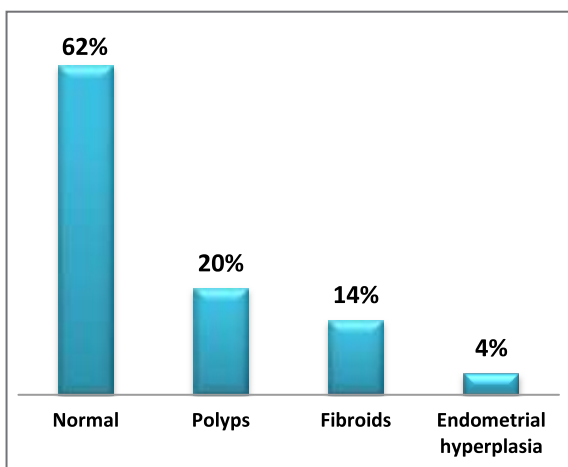


Figure 2: Findings of Endometrial Biopsy

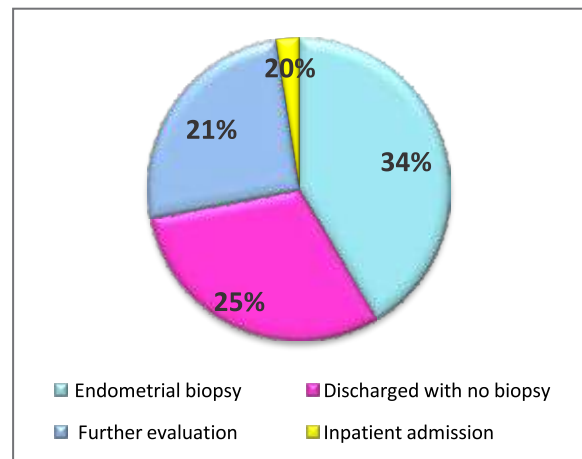


Figure 3: Outcomes of Hysteroscopy

DISCUSSION

According to the Royal College of Obstetrician and Gynecologist, around 1 in 4 women between the ages of 15 to 50 experience heavy menstrual bleeding.³ It is estimated around 5000 women each year in England undergo hysteroscopy however with new guidelines brought in 2018, hysteroscopy should now be offered first line to any patients with heavy menstrual bleeding if their history suggests endometrial pathology and it is estimated that the number undergoing hysteroscopy will increase.

The age range in present study was 38-50 years. Similarly assessing the endometrium is important in those who do not respond to medical therapy as they might have polyps and therefore thorough investigation is needed.⁶

Main referral indications in this study were postmenopausal bleeding 34%(19) and heavy menstrual bleed 28%(16) in comparison to a study⁷ where common indications were menorrhagia (30%), menometrorrhagia (16%), oligo menorrhagia (16%) and postmenopausal bleeding (2%).

The high percentage of intrauterine lesions in the postmenopausal patients (34%) who came with postmenopausal bleeding is consistent with the result of earlier studies and thus underscores the implication of direct hysteroscopy examination of endometrial cavity in postmenopausal women to rule out endometrial threatening pathology.⁸ Transvaginal ultrasounds, for measurement of endometrial thickness, is an easy and effective method for primary evaluation of PMB⁹.

Hysteroscopy is the gold standard procedure for uterine cavity assessment and endometrial biopsy of intra cavity pathology. As the final diagnosis was based on histopathology, so on that basis our study showed a normal endometrium in 92% vs endometrial hyperplasia in only 2(4%) which is in contrast to endometrial hyperplasia in 12 cases (23.5%) in a study conducted.⁶ Hence increasing the number of un-necessary intervention. Although the diagnosis of endometrial cancer may be challenging for early disease, therefore high risk patients with suspicious features should be thoroughly further evaluated.⁹

Majority of patients in our study tolerated diagnostic hysteroscopy and minor operative procedures very well, as in Mysore morcellation of polyps and fibroids,^{10,11} retrievals of foreign body and endometrial biopsy in the office setting with success rate of 91% and only 9% had failed procedure either due to difficult access due to previous treatment to the cervix or due to other reason. Out of fifty six only 11(20%) patients required further procedures in theatres under general anesthesia.

These results were in accordance with another study in 2015 comparing outpatient versus inpatient day case hysteroscopy

including over 500 women from 31 different NHS UK hospitals to establish whether there was any difference in treatment.¹² Inpatient hysteroscopy costs significantly more and reduces functional bed capacity and theatre space.¹³

The British Medical Journal study showed there was no significant difference in AUB after 6 months' post hysteroscopy procedure and overall, the average pain levels were slightly increased.¹² In our study 1(9%) patient had discomfort vs another study where most women experienced the "extra discomfort of treatment under local anesthetic rather than general anesthetic."^{14,15}

Women with AUB can have the outpatient hysteroscopy "see and treat" tactics to avoid the treatment delays, multiple clinic visits,¹⁶ anesthesia risks and absence from work, at the cost of un-necessary interventions. So careful selection of patients by thorough history, examination and transvaginal pelvic ultrasound may alleviate this problem.

CONCLUSION

Outpatient Hysteroscopy can allow rapid diagnosis and endometrial biopsy for evaluation of women with Abnormal Uterine Bleeding.

Conflict of interest:

All authors and co-authors declare that they have no conflict of interests.

Contributors:

NI: Manuscript writing, critical review, editing

BZS: Literature search, result interpretation, study design

SP: Data collection, data analysis, critical review of the manuscript.

All authors approved the final version and signed the agreement to be accountable for all aspects of work.

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Data sharing statement:

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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