



ROLE OF HYSTEROSCOPY AND ITS CORRELATION WITH HISTOPATHOLOGY IN ABNORMAL UTERINE BLEEDING

Gynecology

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ABSTRACT

Background: Abnormal Uterine Bleeding (AUB) is a leading cause of morbidity in gynaecological practice, and it poses a real challenge for gynaecologists. Dilation and Curettage was the most common investigation for Abnormal uterine bleeding previously. Now a days, hysteroscopy has been added on as an emerging tool for investigation of Abnormal uterine bleeding. The present study was conducted to evaluate the usefulness of hysteroscopy with Dilation and Curettage in Abnormal uterine bleeding and also to correlate hysteroscopic finding with the histopathology reports.

Methods- The present study was an observational study, carried out in the Department of obstetrics and gynaecology, Mayo Institute of Medical Sciences, Barabanki. After clearance from the institutional ethical committee. The period of study was one year from December 2016 to November 2017, in which 100 consecutive patients with AUB coming to OPD, and following all the inclusion and exclusion criteria were taken. The data was obtained in a semi structured performa.

Results- Most common bleeding pattern observed in this study was menorrhagia (45%), hysteroscopy shows abnormality detection rate of 55%, this was significantly greater than curettage. While correlating hysteroscopy findings with histopathology it shows that in 45 patients with normal hysteroscopy finding, 40 patients have normal histopathology reports, showing strong correlation. Thus hysteroscopy in association with histopathology is new "gold standard" for evaluation of Abnormal uterine bleeding.

Conclusion- This study concludes that hysteroscopy has a definite role in evaluating abnormal uterine bleeding and it complements histopathology in making a diagnosis in case of abnormal uterine bleeding.

KEYWORDS

Abnormal Uterine Bleeding, Hysteroscopy, Histopathology.

INTRODUCTION:

Abnormal uterine bleeding (AUB) is one of the leading worldwide cause of morbidity, affecting millions of women in both developed and developing countries.¹ It also poses a real challenge for gynecologists. Nearly 20% of women coming to gynaecologists have AUB as presenting complaint.² this further increases to 70% when peri and post menopausal age groups are considered.³ Previously most common investigating procedure to be done in AUB was D & C (dilatation and curettage). D&C detects the cause of AUB in <30% of the cases. As it is a blind procedure; there are chances of missing focal lesions. Besides, it is an invasive procedure, with 2% complication rate.⁴ Hysteroscopy is a recent and valuable tool of gynaecologists for AUB evaluation, it is simple, safe and well tolerated and reliable procedure in the diagnosis of AUB in all age groups.⁵ It can improve the diagnostic accuracy and hence elective surgery of the patients can be planned better.⁶ By this method uterine cavity can be observed and biopsy sample can be taken directly from the area of interest.⁷ It can be called as an eye in the uterus.⁸ In certain cases like polyps and myoma, by use of hysteroscopy, treatment can also be performed with endometrial ablation and resection.⁹

The aim of this study was to evaluate the role of hysteroscopy in AUB, and to correlate hysteroscopic findings with histopathology report.

The International Federation of Gynaecology and Obstetrics (FIGO) has approved a new classification system (polyp, adenomyosis, leiomyoma, malignancy and hyperplasia- coagulopathy, ovulatory dysfunctions, endometrial causes, iatrogenic, and not yet classified (PALM-COEIN) for causes of abnormal uterine bleeding in non gravid uterus of reproductive age.¹⁰

AIMS AND OBJECTIVES-

1. To determine the pattern of various hysteroscopy finding in abnormal uterine bleeding.
2. To study the pattern of histopathological report in Abnormal uterine bleeding.
3. To study the correlation between hysteroscopy finding and histopathological reports in abnormal uterine bleeding.

MATERIAL AND METHOD:

The present study was conducted in the Department of obstetrics and gynaecology, Mayo institute of medical sciences, Barabanki. Sample size for our study consists of 100 consecutive patients visiting the Obstetrics and Gynaecology OPD at Mayo Institute of Medical

Sciences between the period of December 2016 to November 2017, and meeting all the inclusion and exclusion criteria.

Inclusion criteria- age between 20 yrs to 65 yrs, married, suffering from Abnormal uterine bleeding.

Exclusion criteria- active pelvic infection, coagulation disorder, pregnancy, patients on hormonal drugs, patients with active profuse vaginal bleeding.

Patients were selected after a detailed History, Physical Examination, Abdominal and Internal Examination and Routine investigation like hemogram, blood sugar (fasting and PP), LFT, serum electrolyte, USG, X-ray chest and PAP smear. Patients were informed in local language about the treatment process and a written consent was taken. All patient in the study underwent Hysteroscopy followed by Hysteroscopy guided biopsy in form of Dilatation and Curettage. The specimen so obtained was send to Department of Pathology, Mayo Institute of Medical Sciences, Barabanki for Histopathological analysis.

Hysteroscopy was done for all patients in postmenstrual period. Patients were placed in lithotomy position, and position and size of uterus was confirmed by internal bimanual examination. The Hysteroscope was connected to the distention medium that was normal saline. The Hysteroscope was introduced through the cervical canal in the uterine cavity. After complete distention of uterine cavity, cornua of both the sides was identified, and uterine cavity was inspected for any abnormality. Hysteroscopy guided biopsy was performed for suspicious areas; and Dilatation and Curettage was done for all patients. Specimen was send for further Histopathological examination.

RESULTS Patients were further divided in to groups per age group and type of AUB. In the present study, most of the patients were in age group of 41-50 years (39%), followed by 31-40 years (36%), in total (54%) were multiparous while (25%) were nulliparous as tabulated in table no 1.

TABLE NO. 1: Patients Distribution As Per Age Group And Parity (n=100)

AGE GROUP IN YEARS	NULLIPARA GRAVIDA	MULTIPARA GRAVIDA	GRAND MULTIPARA	TOTAL
20-30	4	5	3	12
31-40	11	19	6	36

41-50	8	21	10	39
51-60	1	5	2	8
61-65	1	4	0	5
TOTAL	25	54	21	100

Most common bleeding pattern observed was menorrhagia 45% followed by metrorrhagia 19% (Table No 2)

TABLE NO 2-patients Distribution As Per Aub Pattern:

TYPE OF COMPLAINT	NUMBER OF PATIENTS	%AGE
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MENORRHAGIA	45	45%
METORRRHAGIA	19	19%
MENO/METORRRHAGIA	14	14%
POLYMENORRHEA	12	12%
POST MENOPAUSAL BLEEDING	10	10%
TOTAL	100	100%

Hysteroscopic finding in patients is tabulated in table no. 3, it shows that normal finding was present in 45% patients

TABLE NO 3- Hysteroscopic Finding In Patients Of Aub Vs Symptoms:

Symptoms	Hysteroscopic finding								
	Normal	Hyperplastic	Polyp	Myoma	Adhesion	Sub septate uterus	Forgotten IUCD	Atrophy	Ca endo.
Menorrhagia	20	14	5	4	0	1	1	-	-
Metrorrhagia	8	4	4	2	1	-	-	-	-
Menometrorrhagia	4	6	2	1	-	1	-	-	-
Polymenorrhoea	12	-	-	-	-	-	-	-	-
Postmenopausal bleeding	1	4	2	-	-	-	-	1	2
Total	45	28	13	7	1	2	1	1	2

In patients presenting with menorrhagia (45), 20 have normal findings while rest have one or another kind of abnormality. In metrorrhagia group (19), 18 patients were observed with normal finding, followed by 4, 12 and 1 in menometrorrhagia (14), polymenorrhoea (12), and postmenopausal bleeding (10) group had normal finding. Only one of the important finding of hysteroscopy was considered.

TABLE NO. 4- Correlation Between Hysteroscopic Finding And Histopathologic Report

Histopathological Finding	normal	hyperplastic	TB endometritis	polyp	myoma	No Endometrial tissue	Carcinoma
Hysteroscopic Findings							
Hyperplastic	10	14	2	2	-	-	-
Polyp	-	3	-	9	1	-	-
Myoma	1	-	-	1	5	-	-
Adhesion	-	-	1	-	-	-	-
Subseptate uterus	2	-	-	-	-	-	-
Atrophy	-	-	-	-	-	1	-
Ca endometrium	-	-	-	-	-	-	2
Forgotten IUCD	1	-	-	-	-	-	-
Normal	40	3	1	1	-	-	-

Table no 4 shows correlation between hysteroscopic findings with histopathology reports, it shows that in 45 patients with normal hysteroscopic findings, 40 have normal histopathological report.

While in hyperplastic endometrium hysteroscopic finding (28), 10 were of normal histopathological report while 14 have hyperplasia, 2 have TB endometritis and 2 have polyps.

DISCUSSION:

In the present study hysteroscopy detects abnormality in 55% cases. These findings correlate with Siegler et al who reported abnormality detection rate of hysteroscopy at 43-47%¹⁰. Saraiya et al reported similar findings.¹¹

In the present study endometrial hyperplasia was detected in 28 patients, polyps in 13 patients, myoma in 7 patients, adhesion in 1, subseptate uterus in 2, atrophy in 1, carcinoma endometrium in 2 and forgotten IUCD in 1.

In correlation between hysteroscopic findings and histopathology while 45 patients were with normal hysteroscopy and 54 were with normal histopathology thus showing strong correlation.

While in 28 patients showing hyperplastic hysteroscopic findings, 10 were normal, 14 were with hyperplasia, 2 with TB endometritis, 2 with polyp in histopathology reports.

Diagnostic accuracy of hysteroscopy for endometrial hyperplasia was 68.2, 71.4 and 76.4% in studies reported by Valle et al¹², Sheth et al¹³ and Panda et al¹⁴ respectively.

In this study, intrauterine adhesions were seen in 1 case and sub-septate uterus in 2 cases. These are lesions which cannot be picked up on histopathology. In one case a forgotten IUCD was found. Diagnostic

accuracy of hysteroscopy for polyps was 69% when compared to histopathology, similarly by Valle et al¹² and Sheth et al¹³ have obtained a diagnostic accuracy of 88% and 81% respectively.

In carcinoma endometrium, diagnostic accuracy was 100%. Valle et al¹² and Panda et al¹⁴ have obtained diagnostic accuracy of 100% each; similarly Mencaglia¹⁵ found nearly 100% accuracy in the diagnosis of endometrial neoplasia.

Tubercular endometritis was the only condition missed by hysteroscopic viewing.

Diagnosis of endometrial atrophy is best made by hysteroscopy; curettage does not always yield a diagnosis, and may worsen the condition.

CONCLUSION: It can be concluded that hysteroscopy offers an invaluable advantage of direct visualization of any abnormality within the uterine cavity; but it does not substitute other diagnostic procedures, rather it complements them.

Hysteroscopic guided biopsy and histopathology together can be considered as "gold standard" in evaluating a case of AUB.

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