



Role of Diagnostic Hysteroscopy in Abnormal Uterine Bleeding and its Histopathologic Correlation

KEYWORDS

Abnormal uterine bleeding, dilatation & curettage, hysteroscopy

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ABSTRACT Abnormal uterine bleeding is one of the most frequent menstrual complaints.

A prospective study carried out in the Department of Obstetrics & Gynaecology at Kurnool Medical College Kurnool from April 2013 to march 2014. The present study is aimed to:

1. To study the accuracy of hysteroscopy in abnormal uterine bleeding
2. To correlate hysteroscopic findings with histopathologic findings.

INTRODUCTION

Abnormal uterine bleeding (AUB) is one of the most frequent menstrual complaints. It includes heavy and prolonged periods and any form of irregular bleeding per vaginum¹. Nearly 30% of all gynecological outpatients attendants are for AUB². AUB is a symptom and not a disease³. These menstrual aberrations occur at extremes of reproductive life. Approximately 50% of women by age 46, 75% by age 48 years and 95% by age of 51 years will experience menstrual abnormalities⁴. Approximately 20% of patients present to gynaecologist have complaints of Abnormal uterine bleeding⁵. This percentage raises to 69% when perimenopausal and post menopausal age groups are considered⁶. A definitive diagnosis in perimenopausal bleeding is made by histology.

MATERIALS AND METHODS :

The present study "ROLE OF DIAGNOSTIC HYSTEROSCOPY IN ABNORMAL UTERINE BLEEDING AND ITS HISTOPATHOLOGIC CORRELATION", is a prospective study, which has been carried out from April 2013 to march 2014, in the Department of Obstetrics and Gynecology, Kurnool Medical College, KURNOOL.

All the patients in this study underwent, Hysteroscopy in operation theatre followed by Dilatation and Curettage and the curettings were sent for Histopathology analysis. The results of Hysteroscopy and Endometrial Histopathology were studied and analyzed.

METHOD OF COLLECTION OF DATA:

Inclusion criteria:

Patient of age group between 25 to 60 years who are admitted with history of abnormal uterine bleeding.

Exclusion criteria:

Patients with any demonstrable pelvic pathology like Fibroids, Cancer of cervix, Cancer of vagina, Cancer of endometrium, Acute pelvic infections, Coagulation disorders, Thyroid disease. Pregnancy, Hormonal drugs like

tamoxifen, Patient with active profuse uterine bleeding

Abnormal hysteroscopic findings in our study

1. Atrophic endometrium : A cavity with thin pale smooth surface and sometimes tiny petechial bleeding.
2. Hyperplasia: Endometrial surface is smooth or thickened in polypoidal appearance and when pressed with hysteroscope endometrial groove is seen.
3. Endometrial polyp: Endometrial tissue covered with smooth surface.
4. Submucous myoma: Lesions, not covered with endometrium, shiny, as pearl, sessile appearing and vascularization is seen.
5. Misplaced cu-T.

DILATATION AND CURETTAGE

After diagnostic Hysteroscopy, Endometrial curettage done and curettings are sent for Histopathologic examination

RESULTS

This prospective study was done in tertiary hospital. In this study 100 patients between 25-60 years of age who presented with complaints of abnormal uterine bleeding pattern had undergone two modalities of investigations that are hysteroscopy and dilatation & curettage followed by histopathological examination and the study was undertaken to correlate the hysteroscopic findings with histopathologic report. The results of this study are as follows

A total of 100 patients with complaints of AUB are included in this study. Average of patients 25-60 years are taken. Among them most common in age group between 46-50 years 34(34%) followed by 36-40 years 20(20%) and least in 51-55 i.e. 5(5%). 55-60 age group 5(5%) cases

AUB: DISTRIBUTION ACCORDING TO PARITY (n=100)

In the present study majority were multiparous, para3 is 46 (46%), being the most common. Followed by para4 is 33 (33%), 8(8%) were para1 and the rest of them were para2.

AUB: DURATION OF SYMPTOMS (n=100)

Of the 100 patients majority 42(42%) cases had symptoms of duration more than 1 year.31 had symptoms of duration between 6months to 1 year and 27 had symptoms of duration of less than 6months.

AUB: DISTRIBUTION OF BLEEDING PATTERNS (n=100)

Menorrhagia was the most common bleeding pattern observed in 55 (55%), followed by Polymenorrhagia 13(13%), in 8 cases (8%) menometrorrhagia , and polymenorrhoea in 10 cases, post menopausal bleeding in 10 cases and metropathia haemorrhagica in 2 cases(2%).

AUB: FINDINGS IN HYSTEROSCOPY (n=100)

S.NO	FINDINGS	NUM-BER	PERCENT-AGE
1.	Secretory endometrium	16	16%
2.	Proliferative endometrium	30	30%
3.	Hyperplasia	20	20%
4.	Polyp	13	13%
5.	Sub mucosal myoma	11	11%
6.	Misplaced cu T	1	1%
7.	Carcinoma endometrium	0	0%
8.	Atrophic endometrium	9	9%

AUB: Microscopic description Of Histopathology (n=100)

S.NO	FINDINGS	NUM-BER	PERCENT-AGE
1.	Secretory endometrium	25	25%
2.	Proliferative endometrium	34	34%
3.	Simple hyperplasia with out atypia	17	17%
4.	Simple hyperplasia with atypia	4	4%
5.	Complex .hyperplasia with out atypia	3	3%
6.	Complex .hyperplasia with atypia	1	1%
7.	Atrophic endometrium	4	4%
8.	Endometrial polyp	11	11%
9.	Endometrial carcinoma	0	0%
9.	Fibroid polyp	1	1%

AUB:COMPARISION OF FINDINGS ON HYSTEROSCOPY WITH HISTOPATHOLOGY

Histopathologic report

Hysteroscopic finding	Proliferative	secretory	without SH	with SH	without CH	with CH	Atrophic	Endo. Endometrial	Fibroid	Ca	Total
			A	A	A	A	trium	polyp	polyp	endo.	
Proliferative	21	07	02	00	00	00	00	00	00	00	30
Secretory	03	12	01	00	00	00	00	00	00	00	16
Hyperplasia	02	01	11	02	03	01	00	00	00	00	20
Atrophic	02	02	01	00	00	00	04	00	00	00	09
Ca.	00	00	00	00	00	00	00	00	00	00	00
endometrium											
Submucous myoma	04	03	02	01	00	00	00	00	01	00	11
Endo. polyp	01	00	00	01	00	00	00	11	00	00	13
Misplaced Cu-T	01	00	00	00	00	00	00	00	00	00	01
Total	34	25	17	04	03	01	04	11	01	00	100

SH - simple hyperplasia; CH - complex hyperplasia; A - atypia; TB - tuberculous ; endo. - endometrial, Ca - carcinoma

Abnormality detection rate of Hysteroscopy

HYSTEROS-COPY	HISTOPATHOLOGY		Total
	Abnormal	Normal	
Abnormal	38 (a)	16 (b)	54
Normal	3 (c)	43 (d)	46
Total	41	59	100

Sensitivity =93%
 Specificity =72.8%
 Positive predictive value =70.3%
 Negative predictive value =93.4%

sensitivity,specificity,PPV,NPV are 93%,72.8%,70.3%,93.4% respectively.

DISCUSSION

AUB is an extremely common indication for referral to Gynaecology⁶⁰. Hysteroscopy combined with guided biopsy is most sensitive in disclosing the type of lesion than D&C.

AGE DISTRIBUTION

The incidence of AUB is more common between 46-50 years of age were 34(34%) in this study, followed by 20(20%) in 36-40, least in 51-55 i.e. 5(5%),

PARITY DISTRIBUTION IN AUB:

AUB is common in multiparous women in 92(92%), in which Para 3 were 46(46%) more affected.

DISTRIBUTION OF BLEEDING PATTERNS

In the present study Menorrhagia being the most common complaint, accounts for 55(55%) of the cases.

HYSTEROSCOPY FINDINGS

Hysteroscopy diagnosed 46(46%) cases as normal cases and this was similar to the Seigler and Silander studies and

Seigler study Hysteroscopy diagnosed 54 (54%) cases with intrauterine pathology

ABNORMALITY DETECTION RATE

In our study sensitivity, specificity, PPV, NPV of Hysteroscopy in patients with AUB are 93%, 72.8%, 70.3%, 93.4%. The research of Dueholm et al (2001) showed sensitivity, specificity of Hysteroscopy as 84%, 88%. Bonnamey et al⁶⁷(2002) reported sensitivity, specificity of Hysteroscopy as 78%, 97% in patients with AUB,

Kelekei et al(2005) found sensitivity, specificity as 87.5%, 100% in detecting intracavitary abnormalities. As seen in most of studies reported the sensitivity of Hysteroscopy in diagnosing intrauterine lesions is more than 80% quite compatible with the result of this study. This firmly proves Hysteroscopy as a valid diagnostic method in AUB.

Incidence of hyperplasia in hysteroscopy in different studies.

The present study shown the incidence of hyperplasia as 20% similar to Jyostna et al 22.6% and Sunasoguktas 24.5.

Incidence of submucous myoma in different studies

The present study shows the incidence of submucous myoma as 11% it is similar to the study of Dejong

Incidence of polyps in different studies The present study shows the incidence of polyps as 13% is similar to the study of Acharya veena 12%, Anuradha pande 10%, Mencalga 9.8%.

Incidence of Atrophic endometrium in different studies

In the present study 59 (59%) were normal, this was similar to the study of Dasgupta 56.5% (43.5%) Subhanker et al and Suna Soguktas et al 47.2% (52.8%) found less no of normal cases.

INCIDENCE OF POLYPS IN VARIOUS STUDIES ON HYSTEROSCOPY

In my study detection of Endometrial polyp by Hysteroscopy had sensitivity, specificity, PPV, NPV 100%, 98%, 85%, 100%.

In the study of Allameh et al⁶⁹(2007) sensitivity, specificity, PPV, NPV in detection of polyp are 93%, 100%, 100%, 95.4%.

INCIDENCE OF ENDOMETRIAL HYPERPLASIA IN VARIOUS STUDIES BY HYSTEROSCOPY

In my study sensitivity, specificity, PPV, NPV in detection of endometrial hyperplasia by hysteroscopy are 68%, 96%, 85%, 90%. In the study of Allameh et al(2007) the sensitivity specificity PPV NPV for detection of endometrial hyperplasia were 25%, 89.7%, 12.5%, 93.3% respectively

CONCLUSION

Hysteroscope is a valuable & simple. In patients with abnormal uterine bleeding hysteroscopy provides the possibility of immediate diagnosis and effective treatment. It allows finding out of the source of bleeding and perform a directed biopsies of the suspected area. It affords more accurate diagnosis than dilatation and curettage for intrauterine pedunculated pathologies

Diagnosis of endometrial atrophy is best diagnosed by hysteroscopy as curettage always does not yield positive diagnosis. It is sensitive, low-risk technique. It is concluded that hysteroscopy was more accurate (100%) in identifying intrauterine pathologies like endometrial polyp, submucous myoma and misplaced cu-T than dilatation and curettage alone.

Histopathology has 100% accuracy in diagnosing carcinoma endometrium. The diagnosis of hyperplasia its types and carcinoma was only possible after histopathologic examination.

REFERENCE

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