

Role of hysteroscopy In abnormal uterine Bleeding

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I. Introduction

Menstrual dysfunction is the cause of discomfort, inconvenience and disruption of healthy lifestyle, which affects millions of women in both developed and developing world. Until recent times, usual method of evaluating this symptom was dilatation and curettage. But this detects the cause in less than 50% of the cases. Hysteroscopy offers a valuable extension of the gynecologist's armamentarium. It can improve the diagnostic accuracy and can permit better treatment of uterine diseases. Use of hysteroscopy in abnormal uterine bleeding is almost replacing blind curettage, as it "sees" and "decides" the cause. This is because the uterine cavity can be observed and the area in question can be curettage. In fact, it is an eye in the uterus.

Abnormal bleeding is the cause for 1/3rd of the gynecological consultations and 2/3rd of the hysterectomies (1). The prevalence ranges from 9 to 30% (2). Since Gimpelson and Rappold reported that hysteroscopy combined with guided biopsy was more accurate than dilatation and curettage, hysteroscopy is considered an accurate 'gold standard' in uterine cavity evaluation. (3)

Hysteroscopy permits direct visualization of the cervical canal and uterine cavity, enabling observation of intrauterine abnormalities. An accurate diagnosis may result in surgical or medical treatment directed at the specific pathology and may avoid the need for major surgery. Despite the lack of adequate information about the diagnostic accuracy, it is used in many studies with and without endometrial sampling as a reference standard.

AIMS AND OBJECTIVES

- To evaluate the intrauterine pathology in women with Abnormal uterine bleeding.
- Therapeutic intervention.
- Correlation with the histological

Methods And Materials

- Sources of data-

Patients attending gynecological OPD at Umed Hospital, Dr. SN Medical college, Jodhpur. • Sample size- Study includes 100 patients.

- Inclusion criteria- Women with AUB

- Exclusion criteria-

- Viable pregnancy

- Known cases of cervical or uterine pathology.

- Recent uterine perforation and trauma.

- Medical contraindications to any invasive procedures.

- Pre-existing endocrine disorders.

- Study place- Umed Hospital.

□ Sampling method- Random sampling and Sample size is 100.

□ Methods of collection of data- It is the study conducted after evaluating the sheets, case records, videos and images of 100 women with AUB who attended gynecological outpatient department in our institute.

□ Materials- Rigid hysteroscope, light source, uterine distending medium and video camera system, and routine D&C instruments.

□ Methods After taking the detailed history and physical examination, patients were investigated to rule out organic causes of AUB with CBC, RFT, LFT, Blood grouping and Rh typing, coagulation profile, thyroid function test and UPT to rule out pregnancy and USG.

Patients were called on D7-D10 of menstrual cycle (early proliferative phase). Patients were kept NBM for 6 Under IV sedation / paracervical block, patients were placed in dorsal lithotomy position. Perineum was swabbed with povidone-iodine. Posterior vagina was depressed with Sims speculum. The anterior lip of cervix is gasped with Valsellum. A telescope was selected and checked for clarity of the eye piece and objective lens.

The light generator was switched on, the fiber optic cable was attached to the telescope. The telescope was inserted into the diagnostic sheath and the selected medium- normal saline was flushed through the sheath to expel any air within the sheath. Patients general condition, vitals were checked. Any bleeding per vaginum was watched for.

II. Results And Observations

Table 1: DISTRIBUTION ACCORDING TO AGE

AGE(in years)	NUMBER	PERCENTAGE
UPTO 20	02	2.05
21-30	25	25%
31-40	33	33%
41-50	32	32%
51-60	8	8%
TOTAL(mean)	100(38.1)	100%

Table 2: DISTRIBUTION OF CASES ACCORDING TO PARITY

PARITY	TOTAL	PERCENTAGE
0	6	6%
1	23	23%
2	24	24%
3	27	27%
4-5	20	20%
Total	100	100%

Table 3: DISTRIBUTION OF CASES ACCORDING TO CHIEF COMPLAINT

COMPLAIN	NUMBER	PERCENTAGE
DYSMENORRHEA	35	35 %
IRREGULAR MB	64	64 %
REGULAR MB	16	16 %
PAIN ABDOMEN	11	11 %
HEAVY MB	23	23 %
FREQUENT MB	22	22 %

Table 4: DISTRIBUTION OF CASES ACCORDING TO INDICATION OF HYSTEROSCOPY

INDICATION OF HYSTEROSCOPY	NO. OF CASES	PERCENTAGE
AUB	47	47%
AUB with increased ET	12	12%
AUB with other significant USG findings	41	41%

Table 5: DISTRIBUTION OF CASES ACC TO HYSTEROSCOPIC FINDINGS RELATED TO INTRAUTERINE PATHOLOGY

HYSTEROSCOPIC FINDINGS	NO. OF CASES	PERCENTAGE
?RPOC	9	9%
Adenomyotic patches	2	2%
Polyp	37	37%
Fibroid	10	10%
Hyperplastic endometrium	2	2%
Atrophic endometrium	8	8%
Calcified tissue	5	5%
Adhesions	3	3%
Cu T	3	3%
Exophytic cervical growth	1	1%
Invasive mole	1	1%
Abnormal unidentified tissue	5	5%
No abnormal findings	14	14%
Total	100	100%

Table 6: DISTRIBUTION OF CASES ACCORDING TO SIMULTANEOUS INTERVENTION CARRIED OUT DURING HYSTEROSCOPY

HYSTEROSCOPIC INTERVENTION	NO OF CASES	PERCENTAGE
Endometrial Sampling	26	26%
Tissue Retrieval	21	21%
Polypectomy	37	37%
Adhesiolysis	3	3%
Fibroid Resection	10	10%

Cut Removal	3	3%
Total	100	100%

Table 7: DISTRIBUTION OF CASES ACCORDING TO HISTOPATHOLOGICAL FINDINGS

HISTOPATHOLOGY	NO OF CASES	PERCENTAGE
NORMAL	17	18%
ABNORMAL	77	82%
TOTAL	94	100%

Table 8: DIFFERENT STATISTICAL VALUES OF HYSTEROSCOPY IN DIAGNOSIS OF INTRA-UTERINE PATHOLOGISES

SENSITIVITY	94.8%
SPECIFICITY	58.82%
POSITIVE PREDICTIVE VALUE	91.25%
NEGATIVE PREDICTIVE VALUE	71.42%

Table 9: DISTRIBUTION OF CASES ACCORDING TO DURATION OF HOSPITAL STAY

NO. OF DAYS	NO. OF PATIENTS	PERCENTAGE
1 DAY	87	87%
2-4 DAYS	2	2%
5-8 DAYS	11	11%
TOTAL	100	100%

Table 10: DISTRIBUTION OF CASES ACCORDING TO MALIGNANCY IN HISTOPATHOLOGY

HISTOPATHOLOGY	NO OF CASES	PERCENTAGE
NORMAL	17	18.08%
BENIGN	71	75.53%
PRE-MALIGNANT	4	4.25%
MALIGNANT	2	2.12%
TOTAL	94	100

Table 11: INTRA-OPERATIVE COMPLICATIONS WITNESSED DURING THE STUDY

	COMPLICATION	NO OF CASES	INTERVENTION
INTRA-OPERATIVE	HAEMORRHAGE	1	INTRA-UTERINE TAMPONADE
POST-OPERATIVE		NONE	

Table 12: PAIN PERCEPTION DURING THE PROCEDURE

PAIN PERCEPTION	NO. OF CASES
PRESENT	NIL
ABSENT	100

III. Discussion

Abnormal uterine bleeding (AUB) is among the most common gynecological complaints of reproductive age women in ambulatory care settings. AUB not only affects quality of life such as intimate relationships, day to day living but can have serious adverse consequences such as anemia and malignancy. The prevalence of AUB in reproductive age group ranges from 9% to 30%. Women generally present for care because the amount, timing, or other characteristics of the bleeding have changed from their individual norm. Many women and their physicians remain unaware of the impact of this phase.

Our study was conducted in Ummid hospital, Jodhpur on patients attending Gynecology OPD for complaints of abnormal uterine bleeding. Out of the total admission in our unit, 100 cases of AUB were selected which fulfilled the criteria of study.

In our study, majority of cases i.e. 33% were between 31-40 years of age. Mean age group was 38.1 years. This is in correspondence with several other studies like Guin Gita et al(4), Reethu Varadarajan et al(5).

The main complaint of patients in present study was irregular menstrual bleeding (64%), dysmenorrhea (35%), heavy menstrual bleeding (23%) or combination of these symptoms. Reethu Varanjan(5) et al studied 50 cases among which 52% had painless bleeding and dysmenorrhea was seen in the remaining cases(48%). The commonest type of bleeding was menorrhagia(68%), followed by polymenorrhoea(22%), metrorrhagia (6%) and metropathiahemorrhagica(4%). Vahadat et al (6) mentioned that major menstrual pattern was menometrorrhagia.

In this study, 86% had abnormal hysteroscopic finding, whereas 14% appeared normal on hysteroscopy out of which polyp were most common, i.e. 37% followed by uterine fibroid in 10% of cases,

RPOCs in 9%, atrophic endometrium in 8% , abnormal unidentified tissue in 5% , adhesions in 3% , CuT in 3%, adenomyotic patches in 2% , hyperplastic endometrium.

Commonest endometrial pathology on hysteroscopy-

Author	Polyp	Hyperplasia	Myoma
Patil (6)	9%	18%	11%
Dasgupta S (7)	12.3%	25.7%	18.3%
Trajkovic(8)	20.5%	8.5%	7.7%

In 2% and invasive mole and exophytic cervical growth in 1 % of cases each.

•Hysteroscopic polypectomy was the most common intervention performed (37%), followed by endometrial sampling (26%), tissue retrieval (21%), fibroid resection (10%) , adhesiolysis (3%) and CUT removal (3%)
Tissue sampling was done in 94% cases where 77 cases had abnormal histopathology report and 17 cases had normal Histopathology reports.

• The power of hysteroscopy in detecting endometrial pathology was calculated as sensitivity, specificity, positive predictive Value and negative predictive value being 94.8% ,58.82%,91.25% and 71.42% respectively. In Barati et al(9)57, 116(78.8%) patients were normal and 31(21.2%) patients were abnormal pathologically, and cervical canal polyp was the commonest lesion.

• 87% cases of our study were discharge on the same day. 2 patients were discharge on 4th day and 11 % cases were

• Discharge between 5-8 days attributed to anemia mostly and intra-uterine complications in 1 case.

• 2.12% cases had malignant findings while 4.25% showed pre-malignant lesions . 75.53% cases were benign in appearance.

Author	Year	Incidence of malignancy
Sciarra(10)	1977	1.26
Jyotsana(11)	2004	1.3
Patil SG(06)	2006	2

And 18.08% (17 cases) had no abnormal finding in histopathology.

There were no major intra or post-operative complications except in one case where hemorrhage was seen after fibroid resection and hemostasis was achieved later by intra-uterine tamponade. Bettocchi et al(12) and Feng et al(13) observed no serious complications. Clark et al in a systemic review of 65 studies reported low incidence of uterine perforation (1 in 6000)

Since most of the cases were done under iv sedation / para – cervical block, none of them complained of pain during the procedure .Jong et al (15)32, 90% had mild pain during procedure

IV. Summary And Conclusion

Summary

This study was carried out tertiary center in 100 patients complaining of AUB with the aim to study the accuracy of hysteroscopy in abnormal uterine bleeding simultaneous therapeutic and to correlate the hysteroscopic findings with histopathologic findings.

V. Conclusion

- Hysteroscopy scores very high over D & C as diagnostic and therapeutic tool.
- Hysteroscopy Is able to pick up benign and malignant pathology to intervene earliest.
- The work present in this thesis is a humble attempt to rigorously evaluate patients with abnormal uterine bleeding via Hysteroscopy, correlate the findings with histopathology and adopt hysteroscopic interventions for common gynecological conditions in order to help identify best practice and enhance clinical outcomes.
- So present study is able to come to conclusion that AUB is the commonest presentation in gynecology OPD which can be dealt with hysteroscopy effectively.

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