HYSTEROSCOPY IN EXCESSIVE UTERINE BLEEDING

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SUMMARY

Fifty cases of excessive uterine bleeding were studied for a period of one year from Jan '92 to Dec. '92. This study included patients with complaints of post-menopausal bleeding (10%) and cases of dysfunctional uterine bleeding (90%).

The ages of patients ranged from 28 to 58 years. Abnormal findings were noted in 60% of cases. The uterine cavity was found to be normal in (40%), polyps (14%), submucous fibroids (6%), hyperplastic Endometrium (30%), tuberculous endometritis (4%), atrophic Endometrium (4%) and synechiae (2%).

Lesions like atrophic endometrium, submucous fibroids, synechiae and tuberculosis of endometrium were diagnosied with 100% accuracy. Histopathological correlation with Hysteroscopy was 92%. The procedure confirmed diagnosis in 68% of cases, changed in 24% and proved to be inaccurate in 8% of cases.

INTRODUCTION

Hysteroscopy is endoscopic visualisation of uterine cavity and endocervix, the areas previously inaccessible to the human eye. Although routine dilatation and curretage was performed as a diagnostic and therapeutic procedure for excessive uterine bleeding, it proved to be ineffective in cases like focal lesions of endometrium or fibroid polyps. Now hysteroscopy not only offers a quick, safe and accurate diagnosis, but also curative in cases of fibroid polyps, intrauterine adhesions, menorrhagia and lost IUCD.

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AIMS AND OBJECTIVES

This study was undertaken to ascertain the accuracy of hysteroscopy in cases of excessive uterine bleeding for the diagnosis of endometrial lesions, and intra-uterine tumours, and comparing hysteroscopy diagnosis with histopathology.

MATERIAL AND METHODS

50 patients between the age group of 28 to 58 years underwent diagnostic hysteroscopy at St. George's Hospital from January '92 to December '92 for a period of one year for

excessive uterine bleeding, which either incapacitiated the patient or increased her awareness about cancer. Hysteroscopy was performed with 7 mm rigid Storz hysteroscope under general anaesthesia in 40 cases and paracervical block and sedation in 10 cases. Carbon dioxide delivered by hysteroflator was used as distending medium in 38 cases in premenstrual phase while normal saline was used in 12 cases when patient was bleeding p.v. It took 5 to 10 minutes to complete the procedure. Operative procedures included target biopsies of the endometrium, cutting synechiae and stalk of submucous fibroid polyp. There are no complications.

OBSERVATIONS

Out of total 50 cases for hysteroscopy with excessive uterine bleeding, 45 were dysfunctional uterine bleeding cases and presented with complaints of polymenorrhagia or metrorrhagia, and 5 cases were of post menopausal bleeding.

The incidence of excessive uterine bleeding was maximum for the age group of 31 to 40 years (48%).

2 cases of endometrial hyperplasia were found to be normal on histopatholgy giving 4% rate of false positive cases of endometrial lesion diagnosis.

False positive rate of intra-uterine tumour diagnosis was 4% as histology in 2 cases of endometrial polyps proved to be normal.

Of 46 cases of correct hysteroscopic diagnosis in 41 cases of DUB, the diagnosis was confirmed in 31 cases, and was changed in 10 cases to 3 cases of submucous fibroids, 5 cases of endometrial polyps and 2 cases of endometrial tuberculosis. In 5 cases of post-menopausal bleeding the clinical diagnosis was confirmed in 3 cases of atrophic endometrium and synechiae and changed to 2 cases of DUB.

Table I

Indications for Hysteroscopy

Indications	No.	%
Dysfunctional uterine bleeding	45	90
Post-menopausal bleeding	5	10
Total	50	100

Table II

Age incidence

Age (Years)	No.	%
28 to 30	6	12
31 to 40	24	48
41 to 50	16	32
51 to 58	4	8
Total	50	100

Table III

Hysteroscopic findigs

Hysteroscopic findings	No.	%
Normal	20	40
Hyperplasia	15	30
Endometrial Polyps	7	14
Submucous Fibroids	3	6
Tuberculous Endometritis	2	4
Atrophic Endometrium	2	4
Synechiae	1	2
Total	50	100

Table IV

Accuracy of endometrial lesion diagnosis

	Hysteroscopic Findings	No	Histological Findings Confirming Hysteroscopy	Refuting Hysteroscopy	False Negative	False Positve
1	Normal	31	31	—	—	—
2	Hyperplasia	15	13	2 (Normal)	—	2
3	Tuberculosis	2	2	—	—	—
4	Atrophy	2	2	—	—	—
	Total	50	48	2	—	2 (4%)

Table V

Accuracy of intra-uterine tumour diagnosis

	Hysteroscopic Findings	No	Histological Findings Confirming Hysteroscopy	Refuting Hysteroscopy	False Negative	False Positve
1	Normal	39	39	—	—	—
2	Endometrial Polyps	7	5	2 (Normal)	—	2
3	Submucous Fibroids	3	3	—	—	—
4	Synechiae	1	1	—	—	—
	Total	50	48	2	—	2 (4%)

DISCUSSION

According to Sciarra & Valle et al (1977) and Corson and Brooks (1983) abnormal uterine bleeding is the commonest indication for hysteroscopy. The incidence varies from 94.6% for Hamou (1984) to 52.9% for Baggish and Barbot (1983). The corrected incidence in our clinical study was 52%.

(i) Endometrial hyperplasia

In endometrial hyperplasia, the endometrium is not only thick, but whitish and fragile. It may be localised or generalised. The highest incidence was in Mangeshikar and Sheth's (1990) study i.e. 26% and the lowest was Sciarra & Valle's (1977) study i.e. 4%. The incidence in the present study was 22%.

(ii) Endometrial polypi

Endometrial polypi are soft to touch, vascular with a large visible arteriole, whiter

Table VI

Clinical diagnosis hysteroscopic diagnosis

	Clinical Diagnosis	No	Hysteroscopic Diagnosis						Confirmed	Changed
			DUB	FIB	POLYP.	TUB	ATR	SYN		
1	DUB	41	31	3	5	2	—	—	31	10
2	Post-Menopausal Bleeding	5	2	—	—	—	2	1	3	2
	Total	46	33	3	5	2	2	1	34(68%)	12(24%)

Table VII

Abnormal hysteroscopic findings

Study	Findings (%)
Hamou (1984)	94.6
Khandwala (1986)	83.3
Sciarra & Valle (1977)	71.2
Motashaw & Dave (1990)	66.5
Bhattacharya (1992)	66
Wamstaker (1984)	58.5
Mangeshikar and Sheth (1990)	56
Baggish and Barbot 9(1983)	52.9
Present Study (1992)	52

than surrounding endometrium and protrude freely into the uterine cavity. The incidence in present study was 10%.

(iii) Submucous fibroids

Submucous fibroids are roundish protrusions fixed to the uterine wall and are yellowish white in colour. The incidence in present study was 6% as compared to other studies.

(iv) Atrophic endometrium

In case of atrophic endometrium, the endometrial cavity appears totally white, avascular and without any elevations or protrusions. The highest incidence of atrophic endometrium was 14.6% for Hamou (1984) and the lowest was 1.6% for Motashaw & Dave (1990). In the

Table VIII

Study / Findigs in %	Enbdometrial hyperplasia	Endometrial Polyps	Submucous Fribroids	Atrophic End.	Uterine Synechiae
Bhattacharya (1992)	16	34	4	4	4
Khandwala (1986)	60	3.3	6.6	3.3	—
Hamou (1984)	23.7	9.1	29	14.6	—
Motashaw and Dave (1990)	22.9	21.5	11.3	1.6	5.6
Mangeshikar and Sheth (1900)	26	4	18	—	—
Sciarra and Valle (1977)	4	40	17.3	6	2
Wamstaker (1984)	12.2	19	7.8	9.8	3
Present Study (1992)	22	10	6	4	2

Table IX

Tuberculous endometritis

Study	Findings (%)
Khandeparkar and Sheth (1990)	10.3
Trivedi and Raval (1984)	2.3
Present Study (1992)	4

present study the incidence was 4%.

(v) Uterine Synechiae

The incidence of uterine synechiae in different studies were - Motashaw and Dave (1990) 5.6%, Bhattacharyya (1992) 4%, Wamstaker (1984) 3% and Sciarra and Valle (1977) 2%. There was only one case in our series with intra-uterine synechiae giving rise to excessive uterine bleeding, the corelation between these two conditions is unexplained.

The overall rate of tuberculosis for different indications like infertility, amenorrhea, abnormal uterine bleeding varies from 10.3% for Khandeparkar and Sheth (1990) to 2.3% for Trivedi (1985). Tuberculosis was detected in 4% cases in our series by presence of tubercles and caseous material in the uterine cavity.

The results regarding accuracy of hysteroscopy of our study are comparable to that of Mangeshikar and Sheth (1990). The false positive rate of 8% or of inaccurate diagnosis for 4 cases of endometrial hyperplasia and endometrial polyps was because of the initial over enthusiasm in the diagnosis of both these conditions.

CONCLUSION

According to Sciarra and Valle (1977), hysteroscopy does not supplant other diagnostic procedures but complements them. The present study has proved the utility of hysteroscopy in the diagnosis of various endometrial lesions and intra-uterine tumours, the incidence of abnormal findings being 60% before histopathology diagnosis and 52% corrected. Lesions like tuberculosis of endometrium, atrophic Endometrium, submucous fibroids and synechiae were diagnosed with 100% accuracy. The hysteroscopic diagnosis proved to be totally inaccurate in 8% of cases. The clinical diagnosis was confirmed in 68% of cases and changed in 24% of cases.

Table X

Accuracy of Hysteroscopy

	Study	Confirmed	Changed	Inaccurate
1	Mangeshikar and Sheth (1990)	66	21	13
2	Present study (1992)	68	24	8

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