HYSTEROSCOPY — A USEFUL DIAGNOSTIC TOOL IN GYNAECOLOGY

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SUMMARY

77 patients with various indications ranging from menorrhagia, infertility to amenorrhoea were subjected to diagnostic hysteroscopy with no complications. Confirmation of hysteroscopic findings was performed by histopathology.

Intrauterine synechae were diagnosed with 100% accuracy. Intrauterine lesions of polyp and fibroids were diagnosed with 84.6% accuracy. The procedure confirmed the clinical diagnosis in 70% cases, changed it in 10.3% cases and proved totally inaccurate in 19.7% cases.

Introduction

Hysteroscopy is the endoscopic visualisation of the uterine cavity and the endocervix. Visualisation of the uterine cavity is an old technique, first performed successfully by Pantaleoni in 1865. However, improvements in instruments, light sources and ancillary apparatus have facilitated the further development of Hysteroscopy.

We have in this study further confirmed the usefulness, superiority and need of this procedure in day-to-day practice in our environment of a developing country.

77 patients underwent hysteroscopy mainly for diagnostic purpose at the Obstetrics and Gynaecology Department, K.E.M. Hospital, Bombay during August 1982 to April 1986 successfully.

Analysis of this data and the utility and importance of the procedure is pointed out and a sincere plea made to include hysteroscopy in the armamentarium of diagnostic and operative procedures in all teaching institutions in our country in Gynaecology and Obstetrics.

Materials and Methods

77 patients between the age group of 20 to 55 years underwent diagnostic hysteroscopy for indications varying from amenorrhoea to menorrhagia as shown in Table I.

All were performed under General Anaesthesia. The telescope of 4 mm diameter (Storz) and a CO_2 hysteroflator was used with CO_2 gas as the distending

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TABLE - I
(SYMPTOMATOLOGY)

		No. of cases (%)
1.	Amenorrhoea	
	Primary	2 (2.6%)
	Secondary	3 (3.9%)
2.	Sterility:	
	Primary	2 (2.6%)
	Secondary	7 (9.1%)
3.	Lost IUD	11 (14.3%)
4.	Post-menopausal bleeding	5 (6.5%)
5.	Increased menstrual bleeding (Polymenorrhoea, menorrrhagia)	47 (61.02)

media for the uterine cavity. The minimum time required was 10 minutes and there were no complications.

Results

As shown in Table II, 20.8% of the 77 patients were in the age group of 30 to 34 years.

Table III depicts the clinical diagnosis made after careful examination of the patient which has been compared with final hysteroscopic diagnosis.

As shown in Table III out of 34 patients of Dysfunctional Uterine Bleeding 16 patients had a normal hysteroscopic

TABLE - II
AGE OF PATIENTS

Range	No. of cases	%
20 - 24	9	11.69
25 - 29	7	9.09
30 - 34	16	20.78
35 - 39	17	22.08
40 - 44	8	10.39
45 - 49	13	16.88
50 - 54	7	9.09

TABLE - III

Clinical Diagnosis of the Patient		Hysteroscopic Diagnosis	
		Conforming clinical diagnosis	Refuting clinical diagnosis
T.B. Endometritis	8	8	0
Fibroid Uterus	13	8	5
Asherman's Syndrome	6	6	0
Lost IUCD	11	10	1
Ca Endometrium	5	4	1
DUB	34	19	16
Total	77	54	23

* The procedure confirmed the clinical diagnosis of 70.12% of cases.

finding. Similarly in 13 cases of fibroid uterus, diagnosed clinically, only 8 had submucous fibroid on hysteroscopic examination.

Histopathological examination was carried out to correlate and confirm the hysteroscopic findings. Table IV depicts the accuracy of the hystoroscopic diagnosis.

clinical diagnosis of DUB confirmed histopathologically in 15 cases, a major operative procedure like hysterectomy based on clinical suspicion of intrauterine polyp or submucous myoma could be avoided for them. Hysteroscopy guided curettage was possible for above cases and correct diagnosis was arrived at.

TABLE - IV
HYSTEROSCOPIC DIAGNOSIS CORRELATED WITH HISTOPATHOLOGICAL FINDINGS IN ENDOMETRIAL AND OTHER CONDITIONS

Scopy findings		Histological findings		False -ve	False +ve
		Confirming the scopy findings	Altering the scopy findings		
(a) Normal	16	15	1 (polypoid)	1	—
(b) Tuberculous Endometritis	8	7	1 (Atrophic)	—	1
(c) Intrauterine Synechae	6	6	0	—	—
(d) Hyperplasia	19	13	6 (normal)	—	6
(e) Plypoid	5	3	2 (normal)	—	2
(f) Fibroid uterus	8	8	0	—	—
(g) Ca Endometrium	4	3	1 (normal endom)	—	1
(h) Lost IUCD	10	10	—	—	—
Total	76*	65	11	1**	10***

* 1 case diagnosed clinically as missing IUCD was not seen on scopy, hence not included.
** 1.31% false -ve
*** 13.15% false +ve

Discussion

Due to its safety and simplicity hysteroscopy has become more practical and new applications have developed including operative hysteroscopy.

The commonest in our study was abnormal uterine bleeding. It is clearly seen as shown in Table IV from our study that hysteroscopic findings correlate near 87% with histological diagnosis, though clinically the diagnosis is otherwise.

In our study due to the findings of normal endometrium in 16 patients with a

Englund (1957) demonstrated that only 64 of 165 women previously curetted for abnormal bleeding had hysteroscopic evidence of complete uterine emptying.

Of the five cases with Carcinoma body uterus suspected clinically 4 had suspicious endometerial changes on hysteroscopy. On fractional curettage performed under hysteroscopic control only three out of five had conclusive carcinoma body uterus.

Tuberculous endometritis was seen in all the three cases of secondary amenor-

rhoea whereas primary amenorrhoea patients had no detectable pathology on hysteroscopy. Of the seven cases of secondary Sterility, Tuberculous endometritis was noted in 4 cases. In all of them the diagnosis was confirmed at Laparoscopy and later by histology.

Taylor et al (1977) have reported combined approach of laparoscopy and hysteroscopy for accurate diagnosis in cases of infertility for intrauterine lesions. they have reported accuracy of 97.5% in their study and a complication rate of 0.67%.

Our study showed an intra-uterine septum in a case of secondary sterility which was confirmed by HSG. One more case of secondary sterility who presented with oligomenorrhoea had intra-uterine synechae, Asherman's syndrome (Grade I) which was treated at the same sitting.

In Asherman's syndrome hysteroscopy enables the physician to see the extent of adhesions, select a therapeutic regimen according to the grades and offer better better prognosis for fertility after treatment. (March et al 1978).

David et al (1978) applied hysteroscopy in the treatment of cervical polyps. Almost invariably the base was found to be deeper in the cervix or the uterus than previously studied.

Removal of lost IUD (intra uterine device) has been achieved much successfully with hysteroscopy. In our series of the 11 cases with missing IUD in 10 it was located in the Uterine cavity and later removed successfully at hysteroscopy. Hysteroscopy will be of particular help if the IUD is fragmanted or embedded in the uterine wall. Similarly the tip of the plastic suction cannulae breaks and gets embedded in the uterine wall. Here hysteroscopic retrieval will be ideal.

Hysteroscopic Tubal Sterilization had been performed to a certain degree of success by various methods like Electrocoagulation and Thermocoagulation (Wamsekar 1983) using Intratubal Plugs (Lindemenn 1973), P Block, (Brundin 1983) and Silicone Rubber Plugs (Erb 1974).

In cases with bad obstetric history, hysteroscopy occasionally brings forth an intrauterine septum which can then be best tackled by operative hysteroscopy.

Conclusion

Thus in conclusion hysteroscopy is strongly recommended as an essential adjunct to other procedures in the diagnosis and management of intrauterine lesions.

Our study has shown beyond doubt that it offers advantages in the management of common conditions like abnormal uterine bleeding, infertility and habitual abortion besides locating and retrieving lost IUD's. Thus as far as the future role of hysteroscopy is concerned Hans Lindemann has beautifully quoted "A vigilant eye in the uterine cavity is better than numerous blind curettages".

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