DIAGNOSTIC HYSTEROSCOPY

(Preliminary Study of 60 Cases)

by

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Hysteroscopy has increasingly attracted the interest of gynaecologists all over the world and its use as a clinical procedure has increased proportionately. It is destined to have a definite role in gynaecology and become a fairly established technique employed to improve and simplify the intrauterine diagnosis and to correct some diseases of the endometrial cavity. It today appears at the very best to be especially useful in complementing the only other available techniques of intrauterine diagnosis viz: currattage and hysterography. It is claimed to be of use in cases with abnormal vaginal bleeding, 'Lost I.U.Ds.', intrauterine adhesions, staging of endometrial carcinoma, etc.

We are presenting here our experience of a preliminary study of diagnostic hysteroscopy in initial 60 cases at T.N.M. College and B. Y. L. Nair Charitable Hospital, Bombay.

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Material and Methods

A total number of 60 diagnostic hysteroscopies were performed during a period of 6 months from 1st August, 1980 to 31st January 1981. The hysteroscopy was done using 5% glucose or carbon doxide as a distention medium. In some of the cases endometrial aspiration cytology was done prior to hysteroscopy and in most of the cases dilatation and curretage was done after hysteroscopy and the material was sent for cytological and histological examination. An attempt was also made to correlate the histopathology and cytology findings with hysteroscopy findings.

Observations

As shown in Table I majority of the cases were from the age group of 20-40 years (65%) and from the parity group 5 and 6 (25%).

Table II shows indications for hysteroscopy. In 31 cases (51.3%), hysteroscopy was performed for excessive menstruation. In 5 cases it was done for postmenopausal bleeding (8.3%). In 11 cases of infertility hysteroscopy was done in addition to diagnostic laparoscopy and tubal testing. In 3 cases of "lost" I.U.D.s with missing tails hysteroscopy was done to

TABLE I
Age and Parity Distribution

Age (years)	No. (%)	PARITY	No. (%)
Less than 20	9 (15%)	Nulliparous	14 (23.33%)
20-30	21 (35%)	1 and 2	15 (25%)
31-40	18 (30%)	3 and 4	10 (16.67%)
41-50	8 (13.33%)	5 and 6	15 (25%)
More than 50	4 (6.67%)	More than 6	6 (10%)
Total:	60 (100%)	Total:	60 (100%)

locate the I.U.D. Initially we had done hysteroscopy on 10 cases of utero-vaginal prolapse before hysterectomy for study purposes and the hysteroscopy findings were correlated on opening the uterine cavity after hysterectomy.

TABLE II
Indications for Hysteroscopy

Indications	No. (%)
Excessive menstruation	31 (51.3%)
Postmenopausal bleeding	5 (8.3%)
Infertility	11 (18.33%)
Lost I.U.D.	3 (5%)
Prolapse (Study Purpose)	10 (16.67%)
Total:	60 (100%)

Table III shows hysteroscopy findings. In 31 cases of excessive menstruation, hysteroscopy revealed hyperplastic endometrium in 25, submucous fibroid polyp in 2, intrauterine adhesions in 1 and normal endometrium in 3 cases.

In 5 cases of postmenopausal bleeding 3 cases had atrophic endometrium, and 2 cases had hyperplastic endometrium on hysteroscopy.

Out of 11 cases of primary infertility in whom hysteroscopy was combined with diagnostic laparoscopy, 4 cases revealed normal endometrium and uterine cavity. In 2 cases uterine anomalies viz. bicornuate uterus in one and subseptate uterus

TABLE III
Histeroscopy Findings

Indication	No.	Histeroscopy Findings						
		Atrophic endo-metrium	Hyperplasti Endome-trium	Normal	Polyp.	I.U.D.	Intra-uterine adhesions	Uterine anomalies
Excessive menstruation	31	-	25	3	2	-	1	-
Postmenopausal bleeding	5	3	2	-	-	-	-	-
Infertility	11	2	2	4	-	-	1	2
"Lost" I.U.D.	3*	-	1	1	-	3	1	-
Prolapse	10	1	3	6	-	-	-	-
Total	60	6	33	14	2	3	3	2

(*In "Lost" L.U.D. group in addition to locating the I.U.D., one case each showed hyperplastic endometrium, normal endometrium, intrauterine adhesions).

in the other, were seen on hysteroscopy. In 1 case there were intrauterine adhesions while in other 2 endometrium was atrophic. These 3 cases had oligohypomenorrhoea. In 2 cases of infertility with history of pulmonary Koch's endometrium had hyperplastic, shaggy, chessy look, suspicious of tuberculous endometritis. In both the case endometrium was sent for guinea pig innoculation and culture for acid fast bacilli. One culture showed acid fast bacilli while other culture was negative.

In 3 cases of "lost" I.U.D.s with missing tails I.U.D.s were located and removed. Two cases showed in addition hyperplastic endometrium and intrauterine adhesions respectively. In 1 case most of the I.U.D. had perforated the uterine wall leaving behind a very small portion inside the uterine cavity, making the hysteroscopic removal difficult. Hence the I.U.D. was removed by laparoscopy.

In 10 cases of prolapse on whom hysteroscopy was performed for study purposes, 6 had normal endometrium, 3 had hyperplastic endometrium and 1 had atrophic endometrium. In 9 cases there was correlation between hysteroscopy findings and the look on cutting open the uterine cavity.

In most of the cases (96%) there was correlation between aspiration cytology, histopathology and hysteroscopy findings.

Discussion

The incidence of detection of these abnormalities depends upon the selection of cases for the procedure. Lindemann and Mohr (1976) report 29% of intrauterine abnormalities among 1100 patients during hysteroscopic sterilisation, while Valle (1978) reports 71 per cent abnormalities among 350 selected cases.

Abnormal vaginal bleeding may occur from a local condition within the uterine cavity or extrinsic causes such as hormonal disturbances, which affect the endometrium and cause it to bleed. Local conditions of the endometrial cavity can often be assessed directly and quickly by hysteroscopy. Submucous fibroid, endometrial polyps, or a malignant tumor may be seen and steps may be taken to deal with the problem. Out of 36 cases with abnormal vaginal bleeding including 31 cases with excessive and 5 cases with postmanopausal bleeding, only 3 had normal endometrium and uterine cavity.

The widespread use of I.U.D.s has produced array of complications such as displacement, perforation to which hysteroscopic techniques are particularly suited. Various authors such as Valle (1978), Gupta *et al* (1977), Tayler and Cumming (1979) report hundred per cent success in retrieving the "lost" I.U.D. when it is intrauterine. On occasion, the I.U.D. will have performed the uterine wall and retrieval through hysteroscope is impossible as was in one of our cases. I.U.D. had to be removed laparoscopically in this case.

In the study of infertility cases, hysteroscopy may be useful. Most investigators report a high percentage of abnormalities that were seen initially at hysteroscopy or at least confirmed by hysteroscopy. In 11 of our cases where both laparoscopy and hysteroscopy was performed, 2 revealed uterine anomalies. In 1 case there was suspicion of bicornuate uterus from the additional opening just above the endocervix, which was confirmed by laparoscopy. In the other case of subseptate uterus the excision of the septum was done at the same time. Hysteroscopy has become an important

part of infertility work up in selected cases.

The diagnosis and management of intrauterine adhesions has received considerable attention, in recent years. Zondek and Rozin (1964), and Edstrom and Fernstrom (1970) noted that hysterography may be misleading. In approximately one third of the cases where hysterography had shown intrauterine adhesious, hysteroscopy revealed normal uterine cavity (Neuwirth, 1978). In our series, 3 cases of intrauterine adhesions were seen. In 1 case there was a history of abortion three months back and post-aborted infection. Intrauterine adhesions were also seen in a case of infertility with atrophic endometrium, and in a case with "lost" I.U.D. which was located in the uterine cavity.

Hysteroscopy is also useful in staging of endometrial carcinoma, depending upon the involvement of endocervix. The localisation of tumor may be helpful in planning and delivery of the treatment. (Nenwirth, 1975). Not a single case of endometrial carcinoma was seen in our series.

Conclusions

The procedure of diagnostic hysteroscopy is safe and the information to be gained by direct viewing of the intrauterine environment may be helpful to the patient. The results of the preliminary study were encouraging as there was almost hundred per cent correlation between histopathology, cytology and hysteroscopy diagnosis.

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