HYSTEROSCOPY IN POSTMENOPAUSAL BLEEDING

Maj SHAKTI VARDHAN*, Lt Col S MOHAN⁺,
Maj P RANJAN[#]

ABSTRACT

The purpose of the present study was to evaluate the utility of hysteroscopy as a diagnostic tool in cases of postmenopausal bleeding. The study includes 42 cases presenting with postmenopausal bleeding on which hysteroscopy was performed using rigid hysteroscope (CIRCON) with glycine 1.5% as the distension medium. In 17 of the 42 cases positive hysteroscopic findings were noted which included 2 cases of endometrial carcinoma, 2 cases of postmenopausal endometritis, 4 cases of endometrial polyp, 5 cases of endometrial hyperplasia, 1 case of submucous myoma and 3 cases of endocervical polyp whereas normal postmenopausal endometrium was noticed in rest of the 25 cases. Endometrial biopsy was done in all these cases so that the hysteroscopic findings could be corroborated with tissue diagnosis. Hysteroscopy along with directed endometrial biopsy proved to be a useful diagnostic aid in cases of postmenopausal bleeding.

MJAFI 2001; 57 : 114-116

KEY WORDS : Hysteroscopy; Postmenopausal bleeding.

Introduction

Postmenopausal bleeding is a cause of worry for the patient as well as the clinician. Often the cause of bleeding can be elicited by careful history taking (such as history of taking hormone replacement therapy) and clinical examination (which may detect vaginal or vulval growths, vaginitis etc.). For the rest of the cases in which a clear diagnosis cannot be arrived at, the only course left in the past was to do a dilation and curettage and send the endometrial tissue so obtained, for histopathological examination. There was always a chance of missing the precise site of intrauterine lesion and hence the biopsy not being representative. Hysteroscopy has added a new dimension in the work up of patients with postmenopausal bleeding. The entire uterine cavity can be visualised directly and any abnormal areas identified precisely and the same taken for histopathological examination. Hysteroscopy can also be undertaken as an office procedure which can save valuable time for the patient and relatives. Hysteroscopy is now widely recognised as a valuable diagnostic tool in the evaluation of cases with abnormal genital bleeding which includes postmenopausal bleeding as well. It is highly accurate for diagnosing endometrial lesions such as polyps, submucous myomas, endometrial adenocarcinoma and hyperplasia [1].

Material and Methods

The present study includes 42 cases of postmenopausal bleeding from September 98 to April 99. All the cases after taking

detailed history and thorough clinical examination were subjected to transabdominal and transvaginal ultrasound to rule out ovarian pathology [2]. Cases with history of taking hormone replacement therapy (HRT) were excluded from the study. Cases with lesions like vaginal or vulval growths and ovarian cyst (detected by clinical examination or ultrasonography) were also excluded from the study. The selected cases after preanaesthetic check-up were taken up for hysteroscopy using 5.5 mm continuous irrigation sheath (CIRCON) under GA. Glycine 1.5% w/v was used as the distension medium with uteropump. The fluid flowing out after distension of the uterus was collected, with the help of a tubing, into a calibrated container. The average volume of fluid used for distension was 450 ml for each procedure, the minimum being 200 ml and the maximum being one litre. There was no major discrepancy between the volume of fluid used for distension and the fluid collected, the maximum difference being 100 ml. Cervix was dilated gently with HA dilators prior to introducing the hysteroscope in the uterine cavity. Hysteroscopic resection of polyp, hyperplastic endometrium and submucous fibroid was done in the same sitting using continuous flow resectoscope 8.3 mm sheath. Endometrium was taken by curettage in all cases and sent for histopathological examination. All the cases were discharged from the hospital the next morning.

Results

Out of 42 cases positive hysteroscopic findings were detected in 17 cases as shown in Table-1. In 2 cases irregular endometrial growths with bleeding surface were noticed which proved to be endometrial carcinoma on histopathological examination. In both the cases there was no invasion of the endocervix and hence they could be diagnosed in Stage-I and managed accordingly. Besides diagnosing endometrial carcinoma, hysteroscopy also proved useful in accurate staging of these cases.

In 2 cases atrophic endometrium was found vascularised by fine capillaries which coalesced at places to form bleeding vascular patches. In 1 of these cases both ostia were found blocked. On histopathological examination both cases were proved to be post-

* Classified Specialists (Obstetrics and Gynaecology), Armed Forces Clinic, Dalhousie Road, New Delhi -110011. ⁺Classified Specialist (Obstetrics and Gynaecology), Army Hospital (Research & Referral), Delhi Cantt-110010. [#]Classified Specialist (Pathology), Armed Forces Clinic, Dalhousie Road, New Delhi-110011.

TABLE 1

Hysteroscopic and Histopathological findings

Hysteroscopic appearance	No. of cases	Histopathological findings
Irregular endometrial growths with bleeding surface	02	Endometrial adenocarcinoma
Atrophic endometrium with bleeding vascular patches	02	Postmenopausal endometritis
Endometrial polyp	04	Benign adenomatous polyp
Extensive polypoid endometrium	05	Adenomatous endometrial hyperplasia
Submucous myoma	01	Fibromyoma
Endocervical polyp	03	Benign cervical polyp
White featureless endometrium	25	Atrophic endometrium (Postmenopausal)

TABLE 2

Comparative hysteroscopic findings

Hysteroscopic (directed biopsy) findings	Liu Y <i>et al</i>	Present study
Total number of cases	129	42
Endometrial carcinoma	13 (10.1%)	02 (4.8%)
Postmenopausal endometritis	00	02 (4.8%)
Endometrial polyp	25 (19.3%)	04 (9.5%)
Endometrial hyperplasia	11 (8.6%)	05 (11.9%)
Submucous myoma	05 (3.8%)	01 (2.4%)
Endocervical polyp	13 (10.1%)	03 (7.1%)
Atrophic endometrium (postmenopausal)	62 (48.1%)	25 (59.5%)

menopausal endometritis. In 4 cases solitary polyps were noticed floating in the distension medium within the uterine cavity which proved to be benign adenomatous polyps on histopathology. Extensive polypoid endometrium was noticed in 5 cases which proved to be adenomatous hyperplasia on histopathology. Submucous myoma was noticed in 1 case and solitary endocervical polyps in 3 cases. White featureless endometrium was seen in 25 cases which proved to be postmenopausal atrophic endometrium histopathologically.

Discussion

In our study, hysteroscopy was performed under general anaesthesia after hospital admission but office hysteroscopy has come up in a big way for evaluation of selected cases of postmenopausal bleeding and abnormal genital bleeding [2-4].

Comparison of the hysteroscopic findings between the present study and the one undertaken by Liu Y *et al* [5] is given in Table-2. To extend the comparison further, endometrial carcinoma was observed in 2 out of 42 i.e. 4.7% cases in the present study, while in another study, it was found in 6 out of 153 cases of postmenopausal bleeding i.e. 3.9% [6].

Hysteroscopic appearance is not always confirmatory of endometrial carcinoma. Hence, hysteroscopy should always be accompanied by biopsy of the endometrium [7]. Concern has been raised regarding the

dissemination of carcinoma into the peritoneum by the spill over of the distension medium into the peritoneal cavity [8] but in practice it does not occur because the superficial cells of the tumour are not viable. It is further substantiated by the fact that malignant cells are not recovered from the peritoneal cavity in women undergoing hysterectomy immediately after hysteroscopy [9].

Hysteroscopy is useful for excluding those patients with abnormal uterine bleeding who show no signs of intrauterine pathology. The combined use of hysteroscopy and endometrial biopsy leads to almost 100% accuracy in the diagnosis of endometrial neoplasia and its precursors [10]. Hysteroscopy represents the ideal technique for the examination of women over the age of 45 years who complain of abnormal uterine bleeding [11]. Thus hysteroscopy combined with endometrial biopsy should be considered the method of choice for identifying intrauterine pathology [12,13,14]. It proved useful for a precise diagnosis in the cases of postmenopausal bleeding included in the present study.

References

1. Torrejon R, Fernandez-Alba JJ, Carnicer I, Martin A. The value of hysteroscopic exploration for abnormal uterine bleeding. *J Am Assoc Gynecol Laparosc* 1997;4(4):453-6.
2. Gupta JK, Wilson S, Desai P, Hau C. How should we investigate women with postmenopausal bleeding? *Acta Obstet Gynecol Scand* 1996;75(5):475-9.
3. Siegler AM. Office hysteroscopy. *Obstet Gynecol Clin North Am* 1995;22(3):457-71.
4. Hidlebaugh D. A comparison of clinical outcomes and cost of office versus hospital hysteroscopy. *J Am Assoc Gynecol Laparosc* 1996;4(1):39-45.
5. Liu Y, Zhou Y, Wen H. Diagnosis and treatment of postmenopausal uterine bleeding by hysteroscopy. *Chung Hua Fu Chai Ko Tsa Chih* 1995;30(12):732-4.
6. Nagele F, O Connor H, Baskett TF, Davies A. Hysteroscopy in women with abnormal uterine bleeding on hormone replacement therapy : a comparison with postmenopausal bleeding. *Fertil Steril* 1996;65(6):1145-50.
7. Saccucci P, Rigon G, Provenza C, Mastrone M. Hysteroscopic features in postmenopausal uterine bleeding. *Minerva Ginecol* 1996;48(10):401-4.
8. Joelsson I, Levine RU, Moberger G. Hysteroscopy as an adjunct in determining the extent of carcinoma of the endometrium. *Am J of Obstet Gynecol* 1971;111:696-702.
9. Parent B, Guedj H, Barbot J, Nodarian P. Hysteroscopic panoramique 1985, Paris.
10. Gubbini G, Filoni M, Linsalata I, Stagnozzi R. The role of hysteroscopy in the diagnosis and follow-up of endometrial hyperplasia. *Minerva Ginecol* 1998;50(4):125-33.
11. Mencaglia L. Hysteroscopy and adenocarcinoma. *Obstet Gynecol Clin North Am* 1995;22(3):573-9.

12. Nagele F, Kurz C, Benes K, Patersky N. Initial experiences with ambulatory irrigation hysteroscopy. *Geburtshilfe Frauenheilkd* 1995;55(8):464-7.
13. Vigada G, Malanetto C. Usefulness of hysteroscopy in the management of abnormal uterine bleeding and intrauterine benign disease. *Minerva Ginecol* 1995 ;47(5):179-82.
14. Gimpelson RJ, Whalen TR. Hysteroscopy as gold standard for evaluation of abnormal uterine bleeding. *Am J Obstet Gynecol* 1995;173(5):1637-8.

ANNOUNCEMENT

BEST ARTICLE AWARD – MJAFI

With effect from the year 1994 all Original Articles published in the MJAFI are being screened for selection of the best two articles. These articles will receive the 'Best Article Award' and the 'Second Best Article Award'. They carry a cash prize of Rs.2000/- and Rs.1000/- respectively to be shared by all authors. Articles are judged for their originality and research content.

So all those who believe that they have original work, not yet published, please send it in fast.

The following articles received the award for 1999:

Best Article Award

Debnath J, Satija L, Sharma RK, Rastogi V, Singh Hariqbal, Mohan Rakesh, Khanna SK. *Transvaginal Saline infusion sonohysterography : Initial Results*. MJAFI 2000; 56(2) : 135-9.

Second Best Article Award

Deb Prabal, Deshpande GU, Rai Ramji. *Correlation of Hormone Receptor Status p53 Mutation and c-cerb B-2 Overexpression with Grading in Breast Cancers*. MJAFI 2000; 56 (4) : 305-8.