



COMPARATIVE STUDY OF ENDOMETRIAL CYTOLOGY AND ENDOMETRIAL BIOPSY IN PERI MENOPAUSAL WOMEN

Gynaecology

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ABSTRACT

Abnormal Uterine Bleeding (AUB) is one of the most common health problems encountered by women. It affects about 20% women of reproductive age, and accounts for almost two thirds of all hysterectomies. Gynaecologists are often unable to identify the cause of abnormal bleeding even after a thorough history and physical examination. Diagnostic evaluations and treatment modalities have been evolving over time. The onus in AUB management is to exclude complex endometrial hyperplasia and endometrial cancer. From D and C + EUA under general anaesthesia the shift to more accurate procedures like hysteroscopy and vision directed biopsy was welcome. But the current minimally invasive procedures like sonohysterography, office vacuum aspiration (Pipette) and the use of office hysteroscopy have revolutionized the management of AUB. We have tried to review the current literature and guidelines for evaluation of endometrium with the twin goals of finding an accurate reason causing the AUB and to rule out endometrial cancer or a potential for the cancer in future. We have also attempted to compare the current procedures and their present perspective vis-à-vis each other. Histological assessment is the final word, but obtaining a sample for histology makes it more accurate, and we have reviewed these techniques to enhance accuracy in diagnosis. Hysteroscopy and directed biopsy is the 'gold standard' approach for most accurate evaluation of endometrium to rule out focal endometrial Carcinoma. Blind endometrial biopsies should no longer be performed as the sole diagnostic strategy in perimenopausal as well as in postmenopausal women with AUB. A single-stop approach, especially in high risk women (Obesity, diabetes, family history of endometrial, ovarian or breast cancer) as well as in women with endometrial hyperplasia of combining the office hysteroscopy, directed biopsy in presence of a focal lesion, and vacuum sampling of endometrium in normal looking endometrium, all without anesthesia is the most minimally invasive and yet accurate approach in current practice.

KEYWORDS

Abnormal uterine bleeding, endometrium, peri-menopause

INTRODUCTION:

Endometrial carcinoma in India ranks third commonest genital cancer next to cervix and ovary. While in western countries there has been increased incidence of carcinoma body of uterus relative to carcinoma cervix and the ratio becomes 1:1.

In India a women has 1 percent chance of developing endometrial carcinoma during her lifetime. Perimenopausal women include premenopausal, menopausal and postmenopausal. Endometrial carcinoma appears to have two distinct pathogenic types. The first variety is found in young perimenopausal women. It is oestrogen dependent and favourable prognosis. The second type is seen in older post-menopausal women with no source of oestrogen stimulation. Here the prognosis is poor.

Weiss et al surveyed the incidence of endometrial cancer in eight areas of United States and found an increase in all sections of the country. In New Mexico with a largely poor population the rates increased from 10.2 cases per 100000 women to 17.9 by 1973. For more cosmopolitan higher income population of San Francisco bay area the rates rose from 24.9 to 40.3 cases per 100000 women over the same time span. More recent figures suggest that over all increase in incidence of endometrial carcinoma in the past few decades has been alarming. The increased incidence has been due to several factors – First there is greater longevity of population in general with better nutrition, health care and living conditions. More women are living long to develop endometrial carcinoma. The average age of diagnosis is 59 years which is more than 10 years older than for cervical carcinoma. Second- increased awareness on part of both physician and patients has led to increased surveillance with earlier and accurate diagnosis. Third- the increased use oestrogen replacement therapy for menopause has led to an increase in endometrial carcinoma. The main object of the work is early detection and early treatment of endometrial carcinoma for better prognosis.

MATERIAL AND METHOD:

The present work of comparative study of endometrial cytology and endometrial biopsy in perimenopausal women has been undertaken in the department of Obstetrics and Gynae in Darbhanga Medical College and Hospital under the supervision of Dr. Asha Jha, Professor & Head of Department of Obs & Gynae.

100 cases of the age group 40-60 years who complained of irregular vaginal bleeding were selected for the study. These patients were from outpatient department as well as inpatient department. Evaluation of the different methods of endometrial sampling has been reported by Cresman and Weed. The standard cervico- vaginal pap smear is not an adequate method of evaluating uterine bleeding. Cervico vaginal smear is positive in only 35-80% of all patients with endometrial carcinoma.

The Gravlee jet washer was used which provides a lavage of endometrial cavity with a negative pressure used to suck the fluid from the reservoir through the cannula inside the uterine cavity and back through the cannula into a collection syringe. The technique has a very high accuracy in detecting endometrial carcinoma.

In a few cases of our study we used simple plastic cannula attached with a syringe to suck out the fluid from inside the endometrial cavity. The collected sample was put on sterilised slide and pap-staining was done.

For endometrial biopsy thin endometrial curettes were used & the tissues were sent for histopathological examination. Though fractional curettage is necessary in suspected cervical lesions we could not do fractional curettage as a routine.

In most cases abundant fluid was obtained to prepare the slides and proceed with Pap-staining. With thorough endometrial curettage tissues obtained were sufficient for histopathological examination.

Patients with cervical and vaginal lesions were not selected for the study.

OBSERVATION:

As already stated the cases of perimenopausal women with the history of irregular vaginal bleeding were taken for study. Of the hundred cases 64 were premenopausal and 36 were postmenopausal. In postmenopausal group out of 36, three cases of endometrial carcinoma were detected by endometrial biopsy and only two cases were diagnosed by endometrial aspiration cytology as shown by the Table No.-1.

Table 1

Total No. of cases undertaken	Premenopausal			Postmenopausal		
	Total No. of case undertaken	By endometrial cytology, detected cases of Endometrial carcinoma	By Endometrial biopsy, detected cases of Endometrial carcinoma	Total number of case undertaken	By endometrial cytology, detected cases of Endometrial carcinoma	By Endometrial biopsy, detected cases of Endometrial carcinoma
100	64	NIL	NIL	36	2	3

The study shows that the accuracy of endometrial cytology over endometrial biopsy is less in diagnosing endometrial carcinoma.

One more thing to realise is that the percentage of endometrial carcinoma in postmenopausal women with irregular vaginal bleeding is quite high as compared to premenopausal women.

DISCUSSION AND CONCLUSION:

Endometrial Carcinoma is typically a disease of post-menopausal age with roughly 75% beyond menopause, around 15% perimenopausal and only 10% still menstruating.

Among all women with post menopausal bleeding uterine malignancy is the cause in 15-25%. So every gynaecologist when confronted with post menopausal bleeding should think for uterine carcinoma after excluding vaginal and cervical causes of bleeding.

Endometrial aspiration is an extension of endometrial biopsy. It allows through evaluation of various types of endometrial diseases as an outpatient procedure. As the patient does not require anaesthesia and the patient feels little discomfort it can be used as the first step of investigation. While a positive result is conclusive a negative result can be falsely negative and such cases may require curettage or hysteroscopy.

REFERENCES:

1. Novak's text book of gynaecology- Howard W. Jones III Anne Colston wenty Lonnie S. Burnett
2. Weiss NS, Szkely Dr, Austin DF : Increasing incidence of endometrial cancer in the United States. New England Journal, 1976
3. Pacheco JC Kempers RD : Etiology of postmenopausal bleeding, Obstet Gynaecol 32:40-46, 1968
4. Mathew M, Gupta R, Krolkowski A. Role of transvaginal ultrasonography and diagnostic hysteroscopy in the evaluation of patients with abnormal uterine bleeding. Int J Gynaecol Obstet. 2000;71:251-3. [PubMed] [Google Scholar]
5. Parsons AK, Lense JJ. Sonohysterography for endometrial abnormalities: Preliminary results. J Clin Ultrasound. 1993;21:87-95. [PubMed] [Google Scholar]
6. Syrop CH, Sahakian V. Transvaginal sonographic detection of endometrial polyps with fluid contrast augmentation. Obstet Gynecol. 1992;79:1041-3. [PubMed] [Google Scholar]
7. Goldstein RB, Bree RL, Benson CB, Benacerraf BR, Bloss JD, Carlos R, et al. Evaluation of the woman with postmenopausal bleeding: Society of radiologists in ultrasound-sponsored consensus conference statement. J Ultrasound Med. 2001;20:1025-36. [PubMed] [Google Scholar]
8. Bonilla-Musoles F, Raga F, Osborne NG, Blanes J, Coelho F. Three-dimensional hysterosonography for the study of endometrial tumors: Comparison with conventional transvaginal sonography, hysterosalpingography, and hysteroscopy. Gynecol Oncol. 1997;65:245-52. [PubMed] [Google Scholar]
9. Bree RL, Bowerman RA, Bohm-Velez M, Benson CB, Doubilet PM, DeDreu S, et al. US evaluation of the uterus in patients with postmenopausal bleeding: A positive effect on diagnostic decision making. Radiology. 2000;216:260-4. [PubMed] [Google Scholar]
10. Kupfer MC, Schiller VL, Hansen GC, Tessler FN. Transvaginal sonographic evaluation of endometrial polyps. J Ultrasound Med. 1994;13:535-9. [PubMed] [Google Scholar]
11. Davis PC, O'Neill MJ, Yoder IC, Lee SI, Mueller PR. Sonohysterographic findings of endometrial and subendometrial conditions. Radiographics. 2002;22:803-16. [PubMed] [Google Scholar]
12. Jorizzo JR, Chen MY, Martin D, Dyer RB, Weber TM. Spectrum of endometrial hyperplasia and its mimics on saline hysterosonography. AJR Am J Roentgenol. 2002;179:385-9. [PubMed] [Google Scholar]
13. Dubinsky TJ, Stroehlein K, Abu-Ghazze Y, Parvey HR, Maklad N. Prediction of benign and malignant endometrial disease: Hysterosonographic-pathologic correlation. Radiology. 1999;210:393-7. [PubMed]