

ENDOMETRIAL ASPIRATION CYTOLOGY VS BIOPSY IN WOMEN WITH ABNORMAL UTERINE BLEEDING

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SUMMARY

In present study, 100 cases of abnormal uterine bleeding were studied. Majority of the patients belong to perimenopausal group. Aspiration cytology and endometrial biopsies were taken. The diagnostic accuracy of diagnosing endometrial malignancy was 100% by aspiration cytology and 80% by endometrial biopsy. Cytology of benign lesions showed lesser accuracy because of lesser exfoliation of benign cells.

Introduction

The improvement in prognosis of various endometrial diseases endometrial carcinoma in particular, seen in last two decades is first and foremost dependent upon an early detection of the disease and management. For the institutions which are less equipped there should be a simple procedure for early diagnosis of endometrial diseases. With this in mind the present work was undertaken to use endometrial cytology and biopsy in women with abnormal uterine bleeding in order to facilitate early diagnosis of carcinoma body of uterus.

Material and Method

The present study was carried out in the Department of Obstetrics and Gynaecology,

Department of Pathology, M.L.B. Medical College, Jhansi. One hundred patients were taken in the year 1983. Patients were subjected to a thorough history taking. General, physical and local examination and then were subjected to aspiration cytology and biopsy. They were treated in the outpatient department.

Observations

Maximum number of patients belonged to group B (36-40 years) and lowest number were observed in group E and H respectively (Table 1).

Majority of them belonged to premenopausal age group 69%. All these patients complained of abnormal uterine bleeding with or without pelvic pathology. 30% of the cases had dysfunctional type of bleeding pattern. 20% of the cases were associated with uterine prolapse. Menstrual irregularity following

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TABLE I
Distribution According to Age

S. No	Group	Age Gr. in years	No. of cases	%
1.	A	30-35	15	15
2.	B	36-40	25	25
3.	C	41-45	16	16
4.	D	46-50	17	17
5.	E	51-55	11	11
6.	F	56-60	10	10
7.	G	61-65	4	4
8.	H	66-70	2	2

insertion and removal of intrauterine contraceptive devices was 10%. 17% of them had come with blood stained discharge related with menstruation.

Highest menstrual irregularity with which the patient presented was menorrhagia 35% followed by bleeding and prolonged cycles in 30%. Polymenorrhea was present in 8% and metrorrhagia in 27% of all the case.

65% cases were with normal looking endometrium and 5 cases suggested malignancy. The material aspirated was inadequate in 10% of the cases. Remaining showed various types of hyperplasia.

Out of 100 cases, 40 were in secretory phase and 36 were in proliferative phase. Four cases were diagnosed as malignant. Twelve with various types of hyperplasia. In 8 cases findings are inconclusive due to inadequate tissue. In order to estab-

lish the findings of aspiration cytology and endometrial biopsy on comparative basis. Table II contains the positive findings based on endometrial biopsy and aspiratory cysology. In this 100% correlation consists in malignancy (rapid de-squamation of cells) for adenomateus hyperplasia, 50% co-relation exists between the cytological and histological studies. There consists 80% co-relations for atypisal hyperplasia.

The results of aspiration cytology and endometrial biopsy were confirmed by hysterectomy speciman. Total of 40 patients underwent hysterectomy operation (Table III).

Hence for carcinoma aspiration cytology was found to be 100% confirmatory.

Discussion

In the light of above mentioned pretext it has been tried to diagnose cases of uterine carcinoma by during aspiration cytology which is an easy OPD procedure.

Papanicolau (1946) showed diagnostic accuracy of malignancy in 92.31% by aspiration lucar where as in this study it was 100%. Hecht (1952) too had accuracy rate of 100% in this desires others who have done similar studies are as follows, Cohen (1974) 95%. Anderson (1976) 90-100%. Ambiya and Sagar

TABLE II
Comparative histological changes

S. No.	Diagnosis	No. of cases (Aspiration cytology)	Biopsy	Correlation %
1.	Normal looking cells	65	75	85.4
2.	Adenomatous hyperplasia	4	2	50
3.	Benign Hyperplasia	6	6	100
4.	Atypical hyperplasia	5	4	80
5.	Malignancy	5	5	100

(1981) 100%, accuracy rate by E.B. was 80%. Wildhack and Graham (1964) have accuracy rate of 82%, Wall *et al* (1954) had figures as high as 91%. These findings were confirmed by hysterectomy specimen.

There the diagnostic accuracy of diagnosing endometrial malignancy was 100% by aspiration cytology by EB it was 80%. Cytology of benign lesions showed lesser accuracy because of lesser exploitation of benign cells.

The nature of the present work was exploratory which established the supremacy of aspiration cytology as a method particularly for early detection of malignancy.

The result of cytology and E.B. were confirmed by hysterectomy specimen. A total of 40 patients underwent hysterectomy operation (Table VIII).

Hence for carcinoma aspiration cytology was found to be 100% accurate.

Discussion

In view of above mentioned pretext it has been tried to diagnose uterine carcinoma by doing aspiration cytology which is an easy O.P.D. procedure.

Papanicolaou (1946) showed diagnostic accuracy of 92.31% in malignancy by aspiration cytology. Hecht (1952) has accuracy rates of 100% in his series. Others who have similar accuracy rates are, Cohen (1974) 95%, Anderson (1976) 90-100%, Ambiya *et al* (1981) 100%. Diagnostic accuracy rate by

endometrial biopsy in Wall *et al* (1954) series is as high as 91%.

In the present study diagnostic accuracy of endometrial malignancy was 100% by aspiration cytology. By endometrial biopsy it was 80%. Cytology of benign lesions showed lesser accuracy because of lesser shedding of the benign cells.

The nature of present work was exploratory which established the supremacy of aspiration cytology as a method, particularly for early detection of malignancy.

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