



## Study of Endometrial Aspiration & Sampling versus Conventional Dilation & Curettage in Patients with abnormal uterine Bleeding

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### Abstract

*Any type of bleeding with increase in duration, frequency, or amount is defined as Abnormal uterine bleeding. (AUB). AUB affects 10-30 % of reproductive age group & up to 50 % of perimenopausal women. The main reason for endometrial sampling is to confirm the benign nature of the problem by ruling out endometrial carcinoma so that appropriate treatment can be offered.*

### Introduction

AUB is the most common presentation in gynaecological disorders. Main reason for endometrial sampling is to rule out endometrial carcinoma so that medical and conservative surgery can be offered.

Women presenting with perimenopausal AUB or history of chronic anovulation are at high risk for developing endometrial pathology. Hence in these patients endometrial sampling on histopathological evaluation becomes necessary.

D&C is the most common endometrial sampling method in India.

It is the commonest invasive method, but there are short & long term complications associated with the procedure. Pipette endometrial sampling on the other hand does not require cervical dilation

and hence can be done as an outpatient procedure without anaesthesia in contrast to D&C by using pipette endometrial sampling.

Endometrial aspiration cytology has been a powerful tool for detection of wide variety of benign atypia, inflammatory changes, and detection of endometrial malignancies.

### Objective

To compare the diagnostic accuracy of pipette endometrial sampling with D&C.

### Material and Method

200 of AUB of different age groups including reproductive, peri reproductive & postmenopausal age groups were studied in the Obs. & gynae

Deptt.of NMCH, between Exclusion criteria with uterine pathology:

Fibroid

Polyps

Adenomyosis

Acute uterine infections

Coagulation disorders

Thyroid disorders

Liver and cardiac diseases patients on Ocp and HRT

A detailed history was taken and the patients were examined clinically.

Endometrial aspiration was done using a no.4 Karman cannula and the cytological evaluation of endometrial smears was done.

The material was fixed on a glass slide with alcohol and stained with papanicolau method.

D&C was done in the same sitting to correlate the histopathological findings.

### Results

In our results both D&C and aspiration cytology had comparable results.

Aspiration sample was up to 100% sensitive and 100% specific in many cases.

In our findings most common pattern of AUB was menorrhagia (50%)

Inadequate sampling was found in 12 % cases due to technical failure or senile atrophic endometritis.

In 188 cases adequate sampling was done. Endometrial hyperplasia was found in 74 cases of D &C and carcinoma endometrium in 2 cases.

	Cases of D&C	Cases with aspiration sampling		correlation
		Consistent	inconsistent	
proliferative	84	78	6	92.05%
secretory	24	24	0	100.00%
hyperplasia	74	68	6	91.75%
atrophic	2	2	0	100.00%
Chronic endometritis	2	2	0	100.00%
Endometrial cancer	2	2	0	100.00%

### Discussion

Endometrial biopsy is an important step in the assessment of AUB. Various methods of endometrial sampling are in practise today like D&C, aspiration by pipette device or karman's device or hysteroscopic guided dye and biopsy. Hysteroscopic guided is best avoided though 100% accurate due to increasing cost and general anaesthesia required in certain cases.

Aspiration cytology can be performed without anaesthesia or analgesia during routine pelvic examination.

Clark et al in his study concluded that outpatient endometrial biopsy has modest accuracy in diagnosing endometrial hyperplasia and additional endometrial assessment should be undertaken.

Sarvus et al<sup>(16)</sup> concluded that the pipette had a 100% sensitivity and 98% specificity and 100% NPV for detection of endometrial hyperplasia.

### Conclusion

Endometrial aspiration cytology is an easy and convenient method. It can be used as an outpatient procedure in detecting endometrial pathology in patients with AUB in all age groups. It has the advantage of being a non surgical process not needing anaesthesia unlike D&C.

### References

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