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

Authors
Dr Neena Agarwal M.D. (Obst. & Gynae)\(^1\),
Dr (Prof.) Reeta Chakore M.D. (Obst. & Gynae)\(^2\)
\(^1\)Assistant Professor, Deptt. of Obstetrics & Gynaecology, Nalanda Medical College & Hospital, Patna, Bihar
\(^2\)DGO, Deptt. of Obstetrics & Gynaecology Nalanda Medical College & Hospital, Patna, Bihar
*Corresponding Author
Dr Neena Agarwal M.D. (Obst. & Gynae)
Assistant Professor, Deptt. of Obstetrics & Gynaecology, Nalanda Medical College & Hospital, Patna, Bihar, India

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 biopsy 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
Dept 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.

<table>
<thead>
<tr>
<th>Cases of D&amp;C</th>
<th>Cases with aspiration sampling</th>
<th>correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consistent</td>
<td>inconsistent</td>
</tr>
<tr>
<td>proliferative</td>
<td>84</td>
<td>78</td>
</tr>
<tr>
<td>secretory</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>hyperplasia</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>atrophic</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chronic endometritis</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Endometrial cancer</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**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 hs modest accuracy in diagnosing endometrial hyperplasia and additional endometrial assessment should be undertaken.

Sarvus et al(16) 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 pathologyi patients with AUB in all age groups. It has the advantage of being a non surgical process not needing anaesthesia unlike D&C.

**References**
