

ABNORMAL UTERINE BLEEDING; HISTOPATHOLOGICAL DIAGNOSIS BY CONVENTIONAL DILATATION AND CURETTAGE

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PROF-1801

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ABSTRACT...Background: Abnormal uterine bleeding is one of the most frequent conditions in gynecology. Hysteroscope & plastic devices for outdoor endometrial biopsy are gaining popularity but in our setup traditional dilatation and curettage play significant role in diagnosis of abnormal uterine bleeding. **Objective:** To detect different histopathological findings in abnormal uterine bleeding by conventional dilatation and curettage. **Design:** Descriptive **Period:** From December 2002 to March 2005. **Setting:** Department of obstetric & gynecology Unit-I Allied Hospital, Faisalabad, under the guidance of Professor Mahnaz Roohi. **Results:** 161 patients with abnormal uterine bleeding divided into adolescent, reproductive and peri-menopausal age groups. Maximum 59.02% patients with abnormal uterine bleeding were perimenopausal. Menorrhagia 49.06% was commonest bleeding pattern. Histopathological reports revealed 62.11% dysfunctional uterine bleeding, 21.73% organic lesions and 16.16% pregnancy complications. Complications occurred only in 0.62%. **Conclusion:** Dilatation and curettage is a safe & successful procedure for detecting intrauterine pathologies in abnormal uterine bleeding.

Key words: Abnormal uterine bleeding, Dilatation and curettage, Dysfunctional uterine bleeding

INTRODUCTION

Abnormal uterine bleeding is a commonly encountered gynecological problem¹. It includes both dysfunctional uterine bleeding & bleeding from structural causes like fibroids, polyps, endometrial carcinoma & pregnancy complications². Dysfunctional uterine bleeding is defined as abnormal uterine bleeding without a demonstrable organic cause³. It may be anovulatory characterized by irregular, unpredictable bleeding (metrorrhagia) or ovulatory resulting in heavy but regular periods (menorrhagia)⁴.

Accurate analysis of endometrial sampling and localization of intrauterine lesions is the goal to effective management and better outcome of problem. Diagnostic techniques available for evaluation of abnormal uterine bleeding include endometrial biopsy, ultrasonography, hysteroscopy and dilatation and curettage⁵.

Endometrial biopsy with pipelle provides an adequate sample for diagnosis of endometrial problem in up to 90% cases but fails to detect polyps & leomyoma⁶. Vaginal probe ultrasonography is excellent screening examination for presence of intrauterine pathology and can assist further evaluation & treatment^{7,8}. Hysteroscopy an accurate diagnostic tool for polyps, Submucous fibroids, endometrial hyperplasia but may miss endometritis^{9,10}. Dilatation and curettage allows more

extensive sampling of uterine cavity and has higher sensitivity than endometrial biopsy especially with smaller in situ lesions. It is often used when endometrial biopsy is inadequate, cervical os is stenotic or dysfunctional uterine bleeding treatment fails^{11,12}.

PATIENTS AND METHODS

A descriptive study conducted at department of obstetrics & gynecology Unit-I Allied hospital, Faisalabad from December 2002 to march 2005. A total of 161 patients were admitted and evaluated by history, examination and investigations such as complete blood count with platelets, ultrasonography, ECG & X-Ray chest where indicated. Patients with thyroid problem or systemic diseases, using IUCD or pills and having coagulopathy were excluded from the study. All patients with abnormal uterine bleeding ranging from under 20 to 50 years of age have been included. Dilatation and curettage was done as an elective procedure. Patients were admitted one day prior to procedure.

RESULTS

161 patients underwent diagnostic dilatation and curettage. Maximum patients (59.02 %) with abnormal uterine bleeding presented in age group 36-50 yrs followed by 36.64% & 4.34% in reproductive & adolescent group respectively (table I).

Commonest abnormal uterine bleeding is due to

dysfunctional uterine bleeding (100 patients=62.11%). Second commonest cause in 21.73% patients is organic cause followed by pregnancy complications in 16.15% (table-II).

Both types of abnormal uterine bleeding (organic lesions & dysfunctional) commonest in Perimenopausal age group ie.85.72%, 59%. Least occurrence is seen in adolescent group. Abnormal uterine bleeding due to pregnancy complications is commonest (57.69%) in reproductive age group (table-III).

Order of bleeding pattern is menorrhagia (49.06%) followed by menorrhagia (39.13%) and post menopausal bleeding (6.83%).

DISCUSSION

Abnormal uterine bleeding is a common gynecological problem accounting for up to 20% office visits to gynecologists¹³. The management of abnormal uterine bleeding can involve many decisions about diagnosis & treatment^{14,15}. Conventional dilatation and curettage is commonly used in developing countries with limited

resources as a standard and often the only mean of assessing abnormal uterine bleeding. Methods which require technological equipment and expertise are usually unavailable. Here the preferred option of assessing status of endometrium & intrauterine lesions remains to be diagnostic curettage.

Abnormal uterine bleeding predominantly affects women of Perimenopausal age group because of increased incidence of intrauterine lesions. In my study 59.02% of cases were Perimenopausal, 36.64% reproductive age group while these were 70% & 25% in the study given by

| Table I Patients in different age group | | |
|---|-----------|--------|
| Age | No of pts | %age |
| 20 and less (adolescent) | 7 | 4.34% |
| 21-35 yrs (Reproductive) | 59 | 36.64% |
| 36-50 yrs (peri-menopausal) | 95 | 59.02% |
| Total | 161 | 100% |

| Table-II. Revealed morphology after histopathology | | |
|--|-----------|--------|
| Lesion | No of pts | %age |
| Proliferative endometrium | 35 | 21.74% |
| Secretory endometrium | 20 | 12.42% |
| Pregnancy complications | 26 | 16.15% |
| Adenomatous hyperplasia | 24 | 14.91% |
| Cystic glandular hyperplasia | 15 | 9.31% |
| Atypical hyperplasia | 6 | 3.72% |
| Endometritis | 10 | 6.21% |
| Atrophic endometrium | 7 | 4.34% |
| Endometrial & cervical polyp | 7 | 4.34% |
| Submucous fibroids | 6 | 3.72% |
| Endometrial carcinoma | 3 | 1.86% |
| Cervical carcinoma | 2 | 1.24% |
| Total | 161 | 100% |

| Table III Distribution in different age groups (n=161) | | | | | | |
|--|-------------------------|--------|-----------------|--------|--------------------------------|------|
| Age | Pregnancy complications | | Organic lesions | | Dysfunctional uterine bleeding | |
| | No of pts | %age | No of pts | %age | No of pts | %age |
| 20 and less (adolescent) | 5 | 19.23% | - | - | 2 | 2% |
| 21-35 yrs (Reproductive) | 15 | 57.69% | 5 | 14.28% | 39 | 39% |
| 36-50 yrs (peri-menopausal) | 6 | 23.08% | 30 | 85.72% | 59 | 59% |
| Total | 26 | | 35 | | 100 | |

Table IV Different bleeding patterns

| Bleeding patterns | No. of pts | %age |
|--------------------------|------------|--------|
| Menorrhagia | 79 | 49.06 |
| Metrorrhagia | 63 | 39.13% |
| Post menopausal bleeding | 11 | 6.83% |
| Poly menorrhagia | 5 | 3.12% |
| Intermenstrual bleeding | 3 | 1.86% |
| Total | 161 | 100% |

Kaunitz¹⁶. In the study 4.34% cases belong to adolescent group. Abnormal uterine bleeding in adolescent is due to pregnancy complications or dysfunctional uterine bleeding. Although most adolescents with dysfunctional uterine bleeding will develop normal regular menstrual cycle but a significant number may require gynecologist follow up for persistent abnormal uterine bleeding¹⁷.

Organic lesions were found in 21.73% which were 22.5% in study of Mughal N¹⁸. The commonest intra uterine pathology was chronic endometritis in 6.21% which in contrast to 0.8% in the study of Mackenzi¹⁹. Followed by endometrial & cervical polyps 4.35% which were 1% in study carried out by Mackenzi¹⁹. In 3.72% Submucous fibroids & 1.86% of cases endometrial carcinoma were detected. While in a study conducted by Fraser²⁰. Endometrial carcinoma was found in 1.7% of cases.

The commonest differential diagnosis is dysfunctional uterine bleeding which is 62.11% in my study. Out of these 59 % belong to Perimenopausal and 39 % to reproductive age group while it was 38 & 58 % respectively in the study done by Pilli GS et al²¹. Morphological breakup revealed 34.16% normal endometrium (proliferative & secretory) 21.74 % was found to be Proliferative while it was 15.93 % in the study of Fraser²⁰. Secretory 12.42 % which was found to be 13 % & 23 % in Pilli GS et al²¹ and Vaikiani & coworkers²².

In present study 27.95 % was endometrial hyperplasia while it was lower 5.5 % in Vaikiani & coworkers²². The Adenomatous & cystic hyperplasia were 14.91 % & 9.31% which were 22.9% and 17.9% in Nosheen

Waseem and Rukhsana et al²³. The difference in results seem to be apparent that above mentioned study was carried out in clinically diagnosed cases of dysfunctional uterine bleeding.

Most women under 40 years of age with menstrual problem suffer either from pregnancy complications or dysfunctional uterine bleeding and less than 1% have adenocarcinoma²⁴. In my study 16.15% have pregnancy complications. Out of these maximum cases 57.69% occurred in reproductive age group. When evaluating women with perimenopausal menstrual irregularities, pregnancy and cancer must be excluded. Most pregnancies in perimenopause are unplanned and associated with a high degree of miscarriage and therapeutic abortion²⁵. In my study pregnancy complications in perimenopausal were found to be 23.08%

Commonest bleeding pattern in my study were found to be menorrhagia 49.06%, metrorrhagia 39.13% followed by post menopausal bleeding 6.83% intermenstrual bleeding 1.86% and poly menorrhea 3.12%. The bleeding patterns were similar to the study by Mughal N¹⁸. Where they were 48%, 41%, 6%, 3%, and 1.3% respectively. Complications took place in one patient (0.62). It was uterine perforation diagnosed intraoperatively. Complications reported by Mackenzi¹⁹ were 1.7%.

CONCLUSION

In spite of availability of hysteroscope and number of plastic devices for outdoor endometrial biopsy, conventional dilatation and curettage is a successful & safe procedure in abnormal uterine bleeding specially in our socioeconomic conditions.

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Article received on: 14/06/2011

Accepted for Publication: 05/09/2011

Received after proof reading: 02/12/2011

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Article Citation:

Ara S, Roohi M. Abnormal uterine bleeding; histopathological diagnosis by conventional dilatation and curettage. Professional Med J Dec 2011;18(4): 587-591.

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