

Original Research Article

A study of 50 cases of endometrial biopsies in women with complaint of Abnormal uterine bleeding

Aishwarya Keshan¹, Deepshikha Parakh^{2*}, R.K. Tandon³

^{1,2}3rd year Resident, ³Professor and Head

Pathology Department, SBKS MI & RC, Sumandeep Vidyapeeth, Vadodara, Gujarat, India

*Corresponding author email: drparakh1@gmail.com

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Abstract

Background: Abnormal Uterine Bleeding is one of the commonest presentations of patients in gynecology. Abnormal uterine bleeding is a common sign of a number of different uterine disorders ranging from dysfunctional abnormalities or complications of pregnancy to organic lesions such as polyps, hyperplasia, or carcinoma.

Materials and methods: Present study included 50 patients who attended OPD of Gynecology Department with complaints of abnormal uterine bleeding. All the endometrial biopsy specimens were collected and sent to the Pathology Department. All the biopsy was evaluated and an appropriate histopathological diagnosis was made.

Results: Out of 50 cases studied, 30% were found out to be seretory endometrium, 20% proliferative endometrium, 6% simple hyperplasia without atypia, 8% complex hyperplasia without atypia, 4% endometrial hyperplasia with atypia, 8% endometrial polyp, 14% chronic nonspecific endometritis, 2% tuberculous endometritis, 2% Arias - stella reaction, 2% products of conception, 2% complete hydatidiform mole and 2% endometrial carcinoma.

Conclusion: Endometrial biopsy is a safe, reliable and less time consuming outpatient procedure which can be used as an initial diagnostic tool in the patients with abnormal uterine bleeding.

Key words

Abnormal uterine bleeding, Endometrial biopsy, D&C.

Introduction

Abnormal uterine bleeding is a common sign of a number of different uterine disorders ranging from dysfunctional abnormalities or complications of pregnancy to organic lesions such as polyps, hyperplasia, or carcinoma [1-8]. The prevalence of the various abnormalities that lead to abnormal bleeding is difficult to determine precisely, varying with the patient population and the terms used by investigators [9-11]. It is essential to confirm the cause of abnormal uterine bleeding in order to plan appropriate treatment modality. Endometrial biopsy allows the pathologist to examine the cells obtained directly from the lesion itself, hospitalization and elaborate pre-operative preparations are not required. Present study was carried out to find out the causes for abnormal uterine bleeding in women.

Materials and methods

Present study included 50 patients who attended OPD of Gynecology Department of Dhiraj Hospital, SBKS MI & RC, Vadodara, Gujarat, India with complaints of abnormal uterine bleeding. Endometrial biopsy or curettage was done by Gynecologist and samples sent to Department of Pathology for histopathological evaluation. At histopathology department all the biopsy specimens were fixed in 10% formalin for 24 hours after recording the gross morphological features. Tissue after appropriate fixation processed and embedded in paraffin block. After that 4-5 micron tissue sections were cut, and they were stained with H & E stain. The sections were evaluated on microscopy and an appropriate histopathological diagnosis was made.

Results and Discussion

The present study was conducted from January 2019 to August 2019 which consisted of 50 cases of Abnormal Uterine Bleeding which were received in the Gynecology Department consisting of endometrial biopsies and curetting. The different endometrial patterns presenting as abnormal uterine bleeding in women were studied. All endometrial biopsy and curetting

specimens received in the Department of the Pathology, constituted the study material. Microscopic study of the endometrial specimen is imperative for proper diagnosis and therapy of benign as well as malignant lesions.

Amongst 50 cases of endometrial biopsies analyzed in present study, non-neoplastic cases were 98% and neoplastic cases were 02%. In present study, the patients of wide range in ages from 18 years to 62 years were observed. Maximum numbers (41%) of cases were seen in age group of 31-40 years. Minimum numbers (03%) of cases were seen in age group of more than >50 years.

Table - 1 represents the summary of the distribution of different endometrial pathology reported by pathologist in the present study. The highest incidence of secretory endometrium in the present study was dealing with abnormal uterine bleeding (30%). The study done by S. Shaheen, et al. [12] (2005) showed 33.91% which is comparable with our study.

Table – 1: Distribution of endometrial pathology in present study.

| Endometrial pathology | No. of cases | % |
|-------------------------------------|--------------|------------|
| Secretory endometrium | 15 | 30 |
| Proliferative endometrium | 10 | 20 |
| Simple hyperplasia without atypia | 3 | 6 |
| Complex hyperplasia without atypia | 4 | 8 |
| Endometrial hyperplasia with atypia | 2 | 4 |
| Endometrial polyp | 4 | 8 |
| Chronic non-specific endometritis | 7 | 14 |
| Tuberculous endometritis | 1 | 2 |
| Arias-stella reaction | 1 | 2 |
| Products of conception | 1 | 2 |
| Complete hydatidiform mole | 1 | 2 |
| Endometrial carcinoma | 1 | 2 |
| Total | 50 | 100 |

In a study by Shazia R., et al. [13] (2010) showed 26.00% and by Dangal G. [14] (2003) showed 10.70% had a lower incidence of secretory endometrium than the present study. The higher incidence of secretory endometrium in our study may be due to time of menstrual cycle when endometrial biopsy taken was later half of menstrual period according to clinical management of the patient.

Proliferative endometrium was found in 20% of cases in this study which correlated with the observation of Dangal G. [14] which showed 17.80%. In the study conducted by S. Shaheen, et al. [12] showed 58.67% incidence and Shazia R., et al. [13] showed 33.00% incidence of proliferative which are higher than present study. It may be because as part of clinical management patients had taken any external hormones or it can be a different time of menstrual cycle while taking endometrial biopsy.

Endometrial hyperplasia was found as a cause in 18% of abnormal uterine bleeding in present study which is comparable with study conducted by Steven M. Greenwood, et al. [15]. In this study, endometrial hyperplasia was observed in 15% cases which are slightly lower than present study.

In observation of study by Steven M. Greenwood, et al. [15], there were 2% cases of endometrial hyperplasia with atypia which is comparable within 4% cases endometrial hyperplasia with atypia which were observed in present study.

There were 4% cases were observed with pregnancy related changes in women with abnormal uterine bleeding, which are higher than any other study. In the 1 year retrospective study done by Steven M. Greenwood, et al. [15]; it was 1.0% and in the 3 year retrospective study of by Baral R., et al. [16]; it was 2.66% only.

The incidences of endometrial polyp in present study were 8%, which is comparable with the study of E. Dreisler, et al. [17] who observed

7.80% incidence of endometrial polyp and they noted that polyps were rare (0.93%) in the women below the age of 30 years and abnormal uterine bleeding was less frequent among women with polyps in comparison with other women.

Chronic non-specific endometritis was a cause of abnormal uterine bleeding in 14.00% cases. In the study of Shazia R., et al. [13]; 13% of cases observed with chronic non-specific endometritis which is comparable with the present study. Pelvic inflammatory diseases and sexually transmitted diseases may be responsible for higher incidence of endometritis in our study.

In present study, there were two cases of tuberculous endometritis which is comparable with the study of Shazia R., et al. [13] where a single case of granulomatous endometritis was noted.

Statistical difference observed in comparison of pregnancy related changes may be due to difference in the sample size, population and duration and type of the study.

In the present study and a study done by Baral R., et al. [16]; there was a single case of complete hydatidiform mole in each. In the present study there were 2% incidences of endometrial carcinoma observed which is comparable with other studies done by Baral R., et al. [1] who observed 1.0% incidence. As histopathology is the gold standard for the final diagnosis, here also clinicians from the Obstetrics and Gynecology department mostly rely on the report for starting of the treatment [18, 19, 20].

Conclusion

Endometrial biopsy is a safe, reliable and less time consuming outpatient procedure which can be used as an initial diagnostic tool in the patients with abnormal uterine bleeding.

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