

Histopathological findings in women that living Elazig with abnormal uterine bleeding: in 20 years

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Abstract

Aim: Abnormal uterine bleeding refers to any uterine bleeding that occurs in excessive amounts of regular menstrual bleeding or any postmenopausal bleeding. The present study aims to determine histopathological findings in Turkish women with abnormal uterine bleeding in Elazig.

Material and Methods: Retrospectively 420 women with abnormal uterine bleeding were included in the study. Hematoxylin and eosin sections of the cases were re-evaluated by a single pathologist.

Results: Of the 316 premenopausal cases %37,02 was diagnosed as (n=117) proliferative endometrium, %22,46 as (n=71) secretuar endometrium, as %3,79 (n=12) desidualisation, as %1,26 (n=4) atrophy, as %2,53 (n=8) placental tissue, as %12 (n=38) dysfunctional uterine bleeding, %12,34 (n=39) as endometrial polyp, %7,9 (n=25) as endometrial hyperplasia, and %0,63 (n=2) as endometrial adenocarcinoma. Of the 104 postmenopausal cases diagnosed as %10,57 (n=11) proliferative endometrium, %0,96 as (n=1) secretuar endometrium, %17,30 (n=18) as desidualisation, %13,46 (n=14) as endometrial polyp, %39,42 (n=41) atrophy, %12,5 (n=13) as endometrial hyperplasia, %5,76 (n=6) as endometrial adenocarcinoma.

Conclusions: In our region, because endometrial sampling results belong patients with abnormal uterine bleeding which is usually concordant to age and menstrual cycle, We conclude that non-invasive methods should be tried before sampling. Endometrial carcinoma risk is consistent with the literature,so endometrial samplings should not be avoided?

Keywords: Endometrium; Dysfunctional Uterine Bleeding; Histopathology.

INTRODUCTION

Abnormal uterine bleeding (AUB) refers to any uterine bleeding that occurs erratically including excessive amounts of regular menstrual bleeding or any postmenopausal bleeding (1). The most common causes of AUB include fibroids, adenomyosis, endometrial polyps, endometritis, endometrial hyperplasia, endometrial cancer, cervicitis and pre-invasive and invasive lesions of the cervix (2). There are various techniques for evaluating the causes of AUB. These include minimally invasive and invasive procedures such as endometrial curettage biopsy, ultrasonography, endometrial biopsy, hysteroscopy endometrial biopsy, and dilatation and curettage (D&C). Among these techniques, uterine D&C is the most effective one for investigating endometrial lesions and is sensitive and safe for evaluating AUB. In recent years, the diagnostic value of D&C has been evaluated (3). Endometrial sampling is a medical procedure that involves taking a biopsy from the uterine cavity lining tissue. The tissue subsequently undergoes a histopathological evaluation, which helps the physician to make a diagnosis for women with complaint of abnormal uterine bleeding. However, the decision to

carry out endometrial sampling is not always guided by ultrasonography findings (4).

The present study aims to determine histopathological examination in Turkish women with abnormal uterine bleeding in east Turkey.

MATERIALS and METHOD

Women with abnormal uterine bleeding that had been diagnosed in our laboratory between January 1995 and April 2015 were included in the study retrospectively. All patients had vaginal ultrasound reports measuring the endometrial thickness. Ethics committee approval was received. According to medical records, cases were divided into two groups as premenopausal and postmenopausal. Peri-menopausal cases were included to the premenopausal group. Hematoxylin and eosin sections of the cases were re-evaluated by a single pathologist. First, the sufficiency of the samples was assessed. Endometrial tissue samples comprising of one or more glands or stroma were accepted as sufficient, and biopsy samples containing only blood, cervical mucus and

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samples belonging to the cervical mucus, or curettage material containing endometrial glands within vast blood masses, were accepted as insufficient (5) and 420 cases were included in the study. Histopathologic examination was performed and the diagnosis was confirmed.

RESULTS

There are 316 cases in premenopausal period and 104 cases in postmenopausal period. The average age is 44 in premenopausal women and 57 in postmenopausal women. Mean endometrial thickness was measured as 6 ±0.18 mm in premenopausal women, as 11 ±2.2 mm in postmenopausal women.

Of the 316 premenopausal cases 37.02%(n=117) were diagnosed as proliferative endometrium, 22.46% (n=71) as secretory endometrium, 3.79% (n=12) as decidualization, 1.26% (n=4) as atrophy, 2.53% (n=8) as placental tissue, 12% (n=38) as anovulatory cycle findings, 12.34% (n=39) as endometrial polyp, 7.9% (n=25) as endometrial hyperplasia and 0.63% (n=2) as endometrial adenocarcinoma.

Of the 104 postmenopausal cases 10.57% (n=11) were diagnosed as proliferative endometrium, 0.96% (n=1) as secretory endometrium, 17.30% (n=18) as decidualization, 13.46% (n=14) as endometrial polyp, 39.42% (n=41) as atrophy, 12.5% (n=13) as endometrial hyperplasia, 5.76% (n=6) as endometrial adenocarcinoma (table 1).

	Premenopause (n=316)	Postmenopause (n=104)
Proliferative endometrium	%37,2 (n=117)	%10,57 (n=11)
Secretory endometrium	%22,46 (n=71)	%0,96 (n=1)
Decidualization	%3,79 (n=12)	%17,30 (n=18)
Atrophic endometrium	%1,26 (n=4)	%39,42 (n=41)
Placental retention	%2,53 (n=8)	-
Dysfunctional uterine bleeding	%12 (n=38)	-
Endometrial polyp	%12,34 (n=39)	%13,46 (n=14)
Endometrial hyperplasia	%7,9 (n=25)	%12,5 (n=13)
Endometrial adenocarcinoma	%0,63 (n=2)	%5,76 (n=6)

DISCUSSION

Endometrial biopsies and curettages are the most common tissue specimens received by pathology laboratory (6). Endometrial sampling is a conventional diagnostic method still widely used to specify endometrial lesions. AUB is a common sign of different uterine disorders ranging from dysfunctional abnormalities to organic lesions such as polyps, hyperplasia or carcinoma (7).

Pregnancy related and dysfunctional disorders are more common in younger patients whereas atrophy and organic lesions are more frequent seen in older individuals. Atrophy is a common cause of abnormal bleeding (25%) in postmenopausal cases (7). Besides being common in

postmenopausal patients, atrophic endometrium can occur in patients who are in reproductive ages with premature ovarian failure, either idiopathic or due to radiation or chemotherapy for malignancies (6). In the present study, it was found that 1.26% (n=4) of premenopausal cases and 39.42% (n=41) of postmenopausal cases were diagnosed as atrophic endometrium.

Endometrial polyps may present as the most common cause of menometrorrhagia resistant to the medical therapy in reproductive aged women or can cause abnormal bleeding in postmenopausal patients. They are benign uterine pathologies that affect 25% of premenopausal and postmenopausal women. These polyps are histologically composed of endometrial glands surrounding a fine fibrous stromal core. The majority of these polyps are asymptomatic but abnormal uterine bleeding may occur. In general, polyps are benign growths of tissue with no malignancy potential (9,10). Depending on the type of population studied, the prevalence of endometrial polyps can vary from 7.8% to 34.9%. Some studies have reported that endometrial polyps can be found in up to 24% of symptomatic women. In a prospective study of 1000 patients undergoing hysteroscopic evaluation of the uterine cavity prior to in vitro fertilization (IVF), the prevalence of endometrial polyps was found to be 32% (11). According to our study, 12.34% (n=39) of premenopausal cases, 13.46% (n=14) of postmenopausal cases were monitored as endometrial polyp.

Endometrial hyperplasia (EH) is a pathological condition characterized with hyperplastic changes in the endometrial glandular and stromal structures lining the uterine cavity (12). The disorder is generally seen in the 50-54 age group of women and rare under the age of 30. Although its etiology has not been fully clarified, it is implicated that the most cases of EH result from high levels of estrogen, combined with insufficient levels of progesterone (13,14). In postmenopausal women, it frequently manifests itself with abnormal uterine bleeding (13). It was diagnosed with histopathological examination of biopsy, curettage or hysterectomy material (15). In a study by Kucur et al (16) on 744 patients, endometrial hyperplasia was detected in 9.2% of cases and in a study by Tuncer et al. (17) on 679 patients 9% of the cases were diagnosed as endometrial hyperplasia. In this study, of the 316 premenopausal cases 7.9% (n=25) were diagnosed as endometrial hyperplasia and of the 104 postmenopausal cases 12.5% (n=13) diagnosed as endometrial hyperplasia. In parallel with the literature, 9% of the cases were diagnosed as hyperplasia in total.

Dysfunctional uterine bleeding (DUB) term usually refers to a bleeding disorder occurring without an organic cause. But there is no consensus in terminology. DUB expression is used in different meanings in different countries. In USA, DUB is used as anovulatory bleeding caused by hormonal imbalance. It constitutes 10-15% of gynecological complaints. The most commonly (70%) seen at the beginning and the end of the reproductive period. It occurs

after age 40 with 50% frequency, in adolescence with 20% frequency. 30% of DUB occur on reproductive period. One of every 20 women between 30-49 years of age consult with more bleeding and there are no pathological causes in half of this women. That, it is dysfunctional bleeding (18). In accordance with the literature, DUB developed in 12% of the cases due to anovulation cycle in this study.

Endometrial cancer is the fourth most common female malignancy and is the most common gynecological cancer in the United States. In 2006, an estimated 41,200 new cases occurred, accounting for approximately 6% of diagnosed female cancers. Endometrial cancer was estimated to result in 3% of female cancer deaths in 2006 (19). In study by Bitiren et al., in southern Turkey on 518 women, 0.92% of the cases were diagnosed as endometrial carcinoma (20). However, in west of Turkey, in study by Kucur et al., this frequency was found as 6% (15). In this study, endometrial cancer was identified in 0.63% (n=2) of premenopausal cases and in 5.76% (n=6) of postmenopausal cases.

The findings of proliferative and secretory endometrium detected in postmenopausal women are confusing. But we believe that it is due to inadequate clinical examination and that patients are diagnosed as a menopausal although they are not completely menopausal.

CONCLUSIONS

The importance of endometrial sampling in patients with abnormal uterine bleeding is indisputable. In our region, risk of endometrial cancer is significantly higher in postmenopausal women but findings which are consistent with age and menstrual cycles were found in 59.66% of premenopausal women and 50.95% of postmenopausal women. For this reason, we believe that the high endometrial cancer risk in postmenopausal women with abnormal uterine bleeding should not be overlooked and should not be removed from the endometrial sample.

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