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Histopathological Results in a Sample of Hysterectomy Patients at Al- Batool Maternity Teaching Hospital in Baquba, Iraq, Who Had Abnormal Uterine Bleeding

Sawsan Talib Salman

Department of Obstetrics and Gynecology, College of Medicine, University of Diyala, Diyala, Iraq
Corresponding author e-mail sawsan@uodiyala.edu.iq

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Abstract

Background: The most frequent and complex issue for gynecologists is abnormal uterine bleeding.; It is the cause of many gynecologic outpatient visits

Objective: To determine the histological forms in a group of hysterectomized's females who had abnormal uterine bleeding (AUB)

Patients and methods: Between fifteen July 2015, and December fourteen, 2015, there was a descriptive study conducted in the department of obstetrics and gynecology at Al-Batool Teaching Hospital in Baquba City.

Thirty-three women were admitted for total abdominal hysterectomy after presenting with unexplained uterine bleeding throughout the research period. Complete history and examination are included in the questionnaire that has been prepared for the patient. After the hysterectomy, the uterus and adnexa specimens were sent to a professional histopathologist for histopathological analysis.

Results: In this study, the age group 46-55 years had the highest percentage of abnormal uterine bleeding (51.51percentage), and the age group 76-85 years had the lowest percentage (3.03 percent). Low parity had the lowest percentage (9.09 percent), whereas grandmultiparous had the highest rate (60.61percentage). The most frequent histological result were fibroids (42.42 percent), while secretary hemorrhage was found in only 3.03 percent of cases. Age and parity affected the histological results in hysterectomized tissues and specimens.

Conclusion: All patients with “abnormal-uterine bleeding” AUB should be searched for structural root problems because fibroids account for most cases that visit our hospital to get a hysterectomy and proliferative endometrium.

Introduction

Menstruation is characterized as the natural loss of endometrium and blood that happens between menarche and menopause through the reproductive years. An average menstrual cycle lasts between 21 and 35 days, lasts for 2-5 days, and results in an average blood loss of 20-40 ml every cycle [1]. AUB is described as uterine bleeding inconsistent with the pattern seen after menopause or during a normal menstrual cycle in terms of frequency, duration, or amount [2].

Third, gynecological diseases in outpatient clinic visits are attributed to AUB, one of the most

prevalent and difficult problems that gynecologists encounter [3]. It can be brought on by various systemic illnesses, including endocrine abnormalities or medications. As opposed to that, it's possible it's associated with adenomyosis, neoplasia, fibroids, polyps, anovulation, or pregnancy [4]. Numerous terminologies, such as amenorrhea, oligomenorrhea, metrorrhagia, and menorrhagia, are used to describe irregular uterine bleeding. Polymenorrhagia, Polymenorrhea, Menometrorrhagia, and Postmenopausal Bleeding [5]. Sadly, most of this terminology lacks clear definitions and varies worldwide and might signify different things. In light of other concepts like dysfunctional uterine bleeding (DUB), the situation becomes even less clear [6]. A new method was authorized by the international gynecology and obstetrics federation (FIGO) for the classification of AUB in 2011 that incorporated input from a global team of clinician-researchers from more than 17 countries and 6 continents. As per the acronym PALM-COEIN, this categorization method is classified into nine important parts: polyp, adenomyosis, leiomyoma, malignancy and hyperplasia, coagulopathy, ovulatory dysfunction, endometrial disease, iatrogenic, and not yet classified [7]. Endometrial biopsy sometimes referred to as pipelle-based office endometrial biopsy, the many methods used to evaluate abnormal uterine bleeding include dilatation and curettage and hysteroscopy-directed biopsies. These are broken down into invasive (endometrial biopsy) and non-invasive (transvaginal ultrasound, infusion sonohysteroscopy) techniques [8, 9]. a hysterectomy invasive surgical procedure that is typically just advised to women who do not wish to continue being pregnant, especially when previous AUB treatments have failed [10,11].

Therefore, this research aimed to discover several histological patterns in a specimen of a hysterectomy patient with abnormal uterine bleeding.

Patients and Methods

The obstetrics and gynecology department at Al-Batool Teaching Hospital in Baquba City conducted the descriptive study. In the time frame of 15 July 2015 until 14 December 2015. During the study period, 33 women who presented with unusual uterine hemorrhage were hospitalized to have a complete abdominal hysterectomy.

After each patient signed an informed consent form to be included in the study, specific questionnaires were used to collect pertinent medical, gynecological, and sociodemographic data, including the following: (history of previous menstruation like a bleeding pattern, last period date, age, parity, and socioeconomic status). The baseline investigation contains a complete blood volume, Coagulation monitor (bleeding time, clotting time), inconsistent blood sugar, thyroid activity, liver function, Pap test outcome, and through the vagina ultrasound for the uterus and ovaries. An inspection of the pelvis and the whole body was also achieved, along with a pregnancy test. The study excluded women who had bleeding brought on by pregnancy problems, bleeding disorder, an acute pelvic infection history or symptoms, and women who were on hormone therapy for irregular bleeding. After a hysterectomy, samples of the uterus and adnexa were sent for histopathological analysis by a trained histopathologist. Spss ver.17.0 was used to evaluate the data in tables containing percentages and numbers.

Results

The age groupings of patients who reported abnormal uterine bleeding are shown in figure 1. Patients aged 46–55 years had the most significant percentage of cases (51.51 percent), while those aged 76–85 had the lowest rate (3.33 percent).

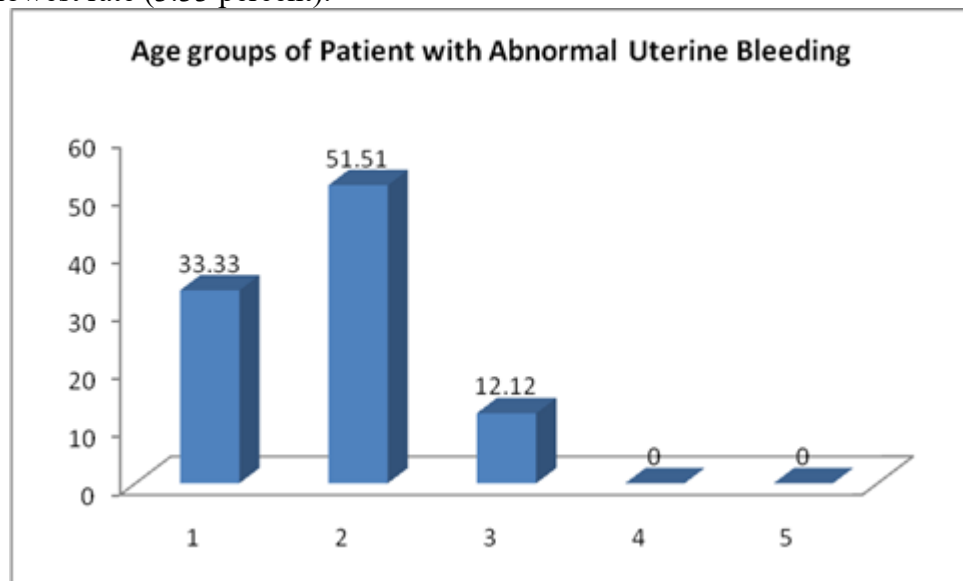


Figure 1 Age groups of Patient with Abnormal Uterine Bleeding

Grandmultiparous patients had the highest percentage of parities (60.61 percent), whereas modest parties had the lowest rate (9.09 percent), according to Figure 2.

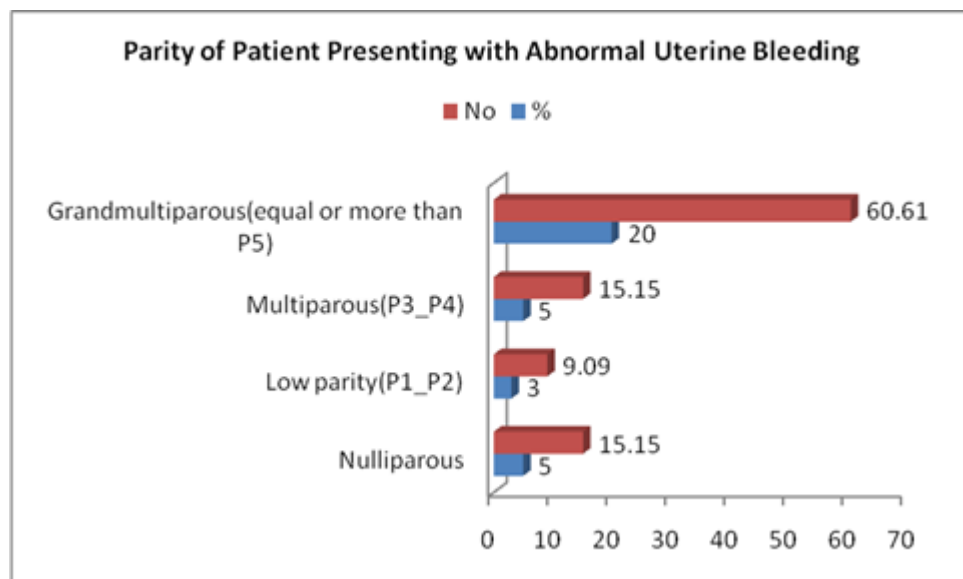


Figure 2: Parity of Patient Presenting with Abnormal Uterine Bleeding

According to Figure 3, histological findings from hysterectomy specimens, fibroids account for a large percentage (42.42 percent), followed by Proliferative bleeding (36.36 percent), polyps in the uterus (12.12 percent), adenomyosis (6.07 percent), and secretary bleeding (3.04 percent).

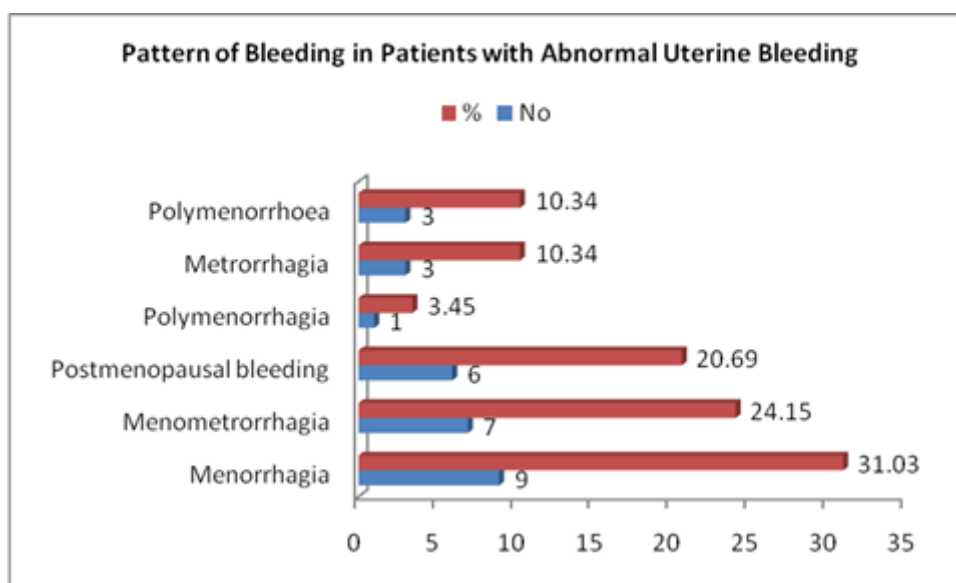


Figure 3 Pattern of Bleeding in Patients with Abnormal Uterine Bleeding

***Nulliparous:** A women who has not delivered a child who reached viability.

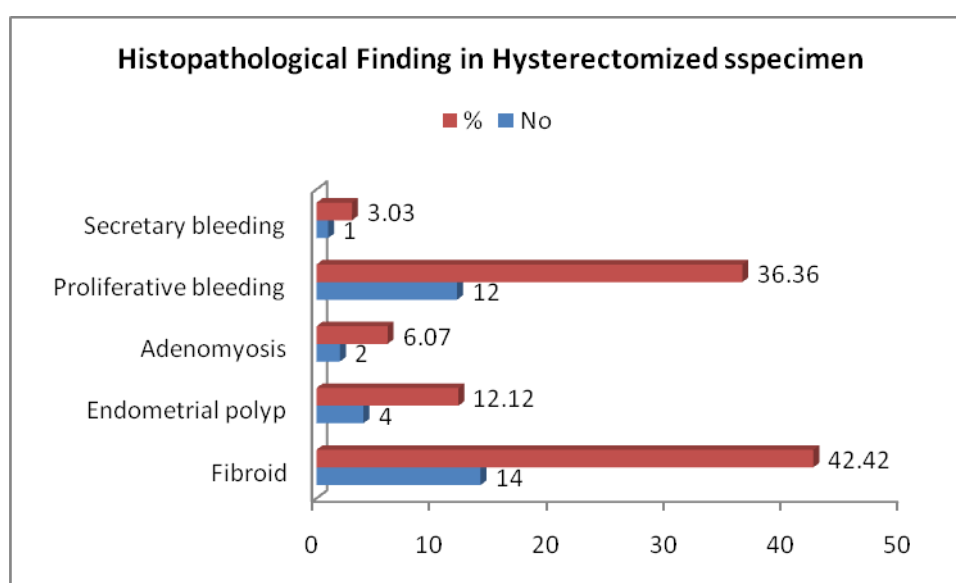


Figure 4 Histopathological Finding in Hysterectomized Specimen.

Additionally, we discovered two cases each of benign serouscystadenomas, mucinous cystadenomas, Intermediate Brenner and bilateral serous papillary ovarian cancer tumors the fibroid prevalence with age, changed, with the lowest percentage occurring in those between the ages of 56 and 65 and 76 to 85. Aged between 65 and 65 years old, they had a slightly greater rate of endometrial polyps than those between 46 and 55 years old. Adenomyosis only becomes apparent with age (Forty-six –Fifty-five year). Mostly in old age, the proliferative bleeding appeared (Thirty-five – Forty-five years). The secretary bleeding is current just in ages (Forty-six –Fifty-five years). Table (1).

Table 1: histopathological finding in hysterectomized specimen in patient with abnormal uterine bleeding according to age.

Age	Fibroid	Polyp	Adenomyosis	Proliferative Endometrium	Secretory Endometrium
35-45	0%	0%	0%	59%	49%
46-55	9%	29%	29%	49%	69%
56-65	8%	20%	0%	9%	0%
66-75	0%	0%	0%	0%	0%
76-85	0%	0%	0%	8%	0%

Histopathological findings also different with parity, with fibroid showing a similar high frequency in nulliparous and grand multiparous (15.15 percent), then comes around the same percentage with low parity and multiparity (6.06 percent), a polyp on the uterus presenting primarily in grand multiparous (9.09 percent), little parity (3.03 percent), and adenomyosis giving with a similar percentage in Grand multiparity as well as both multiparity table (2).

Table 2: - histopathological finding in hysterectomized specimen in patient with abnormal uterine bleeding according to parity.

Age	Fibroid	Polyp	Adenomyosis	Proliferative Endometrium	Secretory Endometrium
Nulliparous	0%	0%	0%	0%	42%
Low Parity	0%	0%	0%	9%	19%
Multiparity	0%	0%	10%	9%	19%
Grand multiparity	3%	20%	0%	72%	5%

Discussion

In this research AUB was most prevalent in the age group forty-six- fifty-five (Forty-six –Fifty-five years) The majority of patients were between the ages of 40 and 49, according to Anuradha et al. 2015 plus Vaidya et al. 2013, who reported most people with irregular uterine bleeding fell into that age range [2,4].

This agrees with "Doraiswami et al." 2011 who discovered similar outcomes may be attributable to early diagnosis of the illness at a young age and proper care, resulting in overall age is becoming older. Also, in climactic phase there is decrease in the ovulatory reserve and estradiol level that lead to frequent ovulation and abnormal uterine bleeding [12]

Additionally, the majority of cases in this study were grandmultiparous (equal to or greater than 5), which is consistent with the findings of "Anuradha et al. "2015 and "Mahmoud et al." 2013 studies. This implies that abnormal uterine bleeding increases with increasing parity because multiparity is more common in the general population [1,4].

Histopathological analysis of women with hysterectomies revealed that the most prevalent lesion (42.42 percent) was fibroid. The incidence increased with age, peaking in the (Forty-six –Fifty-five years) age range, and decreased with aging to just 3.04 percent in the (seventy-six-eighty-five years) age range. This could be because of menopausal changes that cause the uterus to atrophy and the production of hormones to decrease, but its percentage equal in both grandmultiparous and nulliparous While proliferative endometrium (36.36 percent) was the second most common lesion, incidence increased with age and gender, peaking at (Forty-six –Fifty-five years) and equivalence of ≥ 5 . These results conflict with those of Seara (2014), who discovered that endometrial hyperplasia was the most prevalent histological ailment [13], and with Layla et al. (2011). They discovered that endometrial polyps were the most prevalent pathological finding and that their incidence rose with increasing age [3]. The endometrial polyp was only discovered in 15.15 percent of the patients in this investigation, and parity and age had no bearing on its presence.

"Usha et al." (2014) and "Anuradha et al." (2015) observed that proliferative endometrium was the most common illness. However, the percentage of proliferative endometrium was greater in the 35–45-year age group compared to the 46–55-year age group and was 18.18 percent and 15.15 percent, respectively there were no cases of endometrial carcinoma or endometrial cancer found in hysterectomy tissues from any of the age groups examined in this research, including postmenopausal women with ages (56–85). These findings completely disagree with those of Nasira et al., with the exception of three endometrial polyp cases, one fibroid case, and one case identified in the 76–85 age range were all detected in the age categories of 56–65 years.). According to a study from 2010 [15], age increases the risk of endometrial cancer, from about 1 percent at age 50 to 25 percent at age 80. In addition, I disagree with both Bani et al. (2011), and Kauser et al. 2010 revealed that adenocarcinoma of the endometrium was discovered in 9% of the sample and that the age group (70–74 yrs) had the highest prevalence of carcinoma, with atrophic uterine tissue being still one of common finding in women in the postmenopausal era (52 percent).

According to Bani et al. 2011[16], severe ovarian pathological conditions were unintentionally discovered in six women by histological analysis of hysterectomy specimens performed for abnormal uterine hemorrhage.

The study's conclusions show that premenopausal and late reproductive age patients have a higher incidence of organic lesions than do postmenopausal patients. This may be because the sample size for this study was small due to a lack of search time, or because most patients seek medical attention as soon as they notice abnormal uterine bleeding.

Early childbearing and multiparity may also contribute to the lack of endometrial carcinoma in the histopathological specimens, as may a decreased socioeconomic status and risk factors such as diabetic mellitus, obesity, and decrease in consumption of animal fat, and lack of sedentary kind of life, as well as the fact that the majority of endometrial carcinoma instances are not being handled in our city but instead are referred to an oncological center in Baghdad for care.

As a result, irregular uterine bleeding frequently affects women who are perimenopausal and have a high parity is worrisome and needs careful evaluation. Every patient who has AUB should be investigated for fundamental structural causes because most cases that come to our institution for Hysterectomy mainly fibroid followed by proliferative endometrium

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