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ORIGINAL ARTICLE

Determine the Frequency of Endometrial Hyperplasia in Female with Abnormal Vaginal Bleeding

AYESHA NAEEM[1], AMNA ASLAM[2], AMBER-U-NISSA[3], TAYYABA RASHEED[4], TANWEER AKHTAR[5], ZAFREEN NAZ GUDARO[6]

[1]Associate Professor, Department of Obstetrics & Gynaecology, Khawaja Muhammad Safdar Medical College/Allama Iqbal Memorial Teaching Hospital, Sialkot
[2]Assistant Professor, Department of Obstetrics & Gynaecology, Avicenna Medical College & Hospital, Lahore
[3]Lecturer, Chandka Medical College Larkana
[4]Final Year MBBS, Ghulam Muhammad Mahar Medical College, Sukkur
[5]Associate Professor, Department of Obstetrics & Gynaecology, Shaikh Zayed Women Hospital, Shaheed Mohtarma Benazir Bhutto Medical University, Larkana
[6]Ultrasound Specialist, Department of Radiology, Dr. Sulaiman Al-Habib Hospital Riyadh, KSA
Correspondence to: Ayesha Naeem, Email: naeem1683@gmail.com, Cell: 0334 8112636

ABSTRACT

Objective: To determine the frequency of endometrial hyperplasia in female with abnormal vaginal bleeding.
Study Design: Cross-sectional
Place and Duration of Study: Department of Obstetrics & Gynaecology, Allama Iqbal Memorial Teaching Hospital, Sialkot from 1st January 2021 to 31st March 2021.
Methodology: One hundred and ten females with abnormal bleeding were presented in this study. Patients were aged between 40-65 years. Demographically details of age, weight, body mass index and socio economic status were recorded after taking written consent. Complete patients were undergone for transvaginal ultrasound. Frequency of endometrial hyperplasia was recorded.
Results: Mean age of the females was 47.16±7.53 years with mean BMI 26.17±8.44 kg/m^2. Mean weight of the patients were 59.16±17.66 kg. Most of the patients 65 (59.09%) were from urban area and majority of the patients 70 (63.64%) were illiterate. Sixty (54.5%) cases were from low socio-economic status and 50 (45.5%) had high socio-economic status. Endometrial hyperplasia was found in 25 (22.73%) patients, in which 18 (72%) had cystic hyperplasia, adenomatous hyperplasia found in 4 (16%) and 3 (12%) had atypical hyperplasia. Among 25 cases of hyperplasia, menorrhagia found in 15 (60%), polymenorrhea found in 8 (32%) and polymenorrhagia in 2 (8%). Medical treatment were given to 20 (80%) cases and surgical treatment were given to 5 (20%).
Conclusion: The prevalence of endometrial hyperplasia was 22.73% among women with abnormal bleeding. It can be cure by early diagnosis and treatment.
Keywords: Transvaginal ultrasound (TVS), Endometrial hyperplasia, Abnormal vaginal bleeding, Menorrhagia

INTRODUCTION

Menstrual issues are highly morbid and afflict 1 in 5 women throughout their lives. Abnormal uterine bleeding (AUB) is specifically one of the most prevalent menstruation distressing issues. The menstrual disturbance epidemiology has shown that AUB prevalence is approximately 5-15 percent in poor countries, including Pakistan.[1] Out of 1600 gynaecological cases, 400 AUB cases reported an AUB prevalence of 25% per 100 gypsy cases throughout the time period under study. Two hundred and forty one (60%) individuals out of 400 AUB cases were recruited. Abnormal uterine bleeding risk factors include pathological conditions of women's genitals, disorders associated to pregnancy and systemic diseases.[2]

Hormone imbalance patterns (proliferative endometrial disorder, non-secretory endometriumwith stromal and glandular breakdown, pill effect and luteal phase defect), atrophic endometrium, endometrial polyp, terminal and endometrial hyperplasia and endometrial carcinoma are commonly detectable histologically in AUB. However, only around half of cases of AUB showed endometrial abnormalities and the clinical picture dominated the hormone imbalance pattern.[3,4]

In developing nations, the AUB is one of the most frequent cause of hysterectomy, yet 40% of cases were not linked to conclusive organic pathology.[5] The associated problems, such as bleeding, bladder or bowel injury, infection, thrombosis, ovarian failure, and early starting menopause are typically associated with hysterectomy.[6] In poor nations including Pakistan, the prevalence of abnormal uterine bleeding is approximately 5-15%. One half of all women 45.5years of age, 34% 47.8 yrs of age and 90% 50.8 years of age encounter menstrual trouble.[1] Estimates indicate that approximately 6 percent of women between 25 and 44 years of age contact their general physician each year for excessive menstrual loss, about 35 percent of them in the hospital and 60 percent of them in the next 5 years for hysterectomy. There are more than 75000 hysterectomies per year presently, 25-30% of which are carried out with menstrual disorders.[7]

Hysterectomy is linked with a high rate of morbidity (ureteral injuries occur in 1% to 3% of the patients, atelectasis, fallopian tube prolapse, thromboembolic, myocardial infarction, stroke and renal failure) and is used as last prerogative by m, due to size and location of the ureter.[3] Minimal invasive surgery has faster healing, smaller incisions and short hospital stay. The treatment of atypical proliferative lesions from the endometrium as an alternative to hysterectomy was proven to be useful by hysteroscopic resection.[6-10] As endometrium is the most accessible tissue for histopathological uterine bleeding

assessment, many procedures for endometrial collection are performed, including dilation or curettage.[11]

MATERIALS AND METHODS

This cross-sectional study was conducted at Department of Obstetrics & Gynaecology, Allama Iqbal Memorial Teaching Hospital Sialkot from 1st January 2021 to 31st March 2021 and comprised of 110 patients with abnormal bleeding age between 40-65 years. Demographically details of age, weight, body mass index and socio economic status were recorded after taking written consent. All women who had uterine fibroid, comorbidities like hypertension, diabetes mellitus and those did not give any written consent were excluded. Complete patients were undergone for transvaginal ultrasound (TVS). Frequency of endometrial hyperplasia was recorded. Hyperplasia of the endometrium was identified as positive for endometrial thickness greater than 5 mm. The data was entered and analyzed through SPSS-22.

RESULTS

Mean age of the females was 47.16±7.53 years with mean body mass index 26.17±8.44 kg/m^2. Mean weight of the patients were 59.16±17.66 kg. Most of the patients 65 (59.9%) were from urban area and majority of the patients 70 (63.6%) were illiterate. 60 (54.5%) cases were from low socioeconomic status and 50 (45.5%) had high socioeconomic status (Table 1).

Endometrial hyperplasia was found in 25 (22.73%) patients, in which 18 (72%) had cystic hyperplasia, adenomatous hyperplasia found in 4 (16%) and 3 (12%) had atypical hyperplasia (Table 2). Among 25 cases of hyperplasia, menorrhagia found in 15 (60%), polymenorrhoea found in 8 (32%) and polymenorrhagia in 2 (8%) [Table 3]. Medical treatment was given to 20 (80%) cases and surgical treatment were given to 5 (20%) [Table 4].

Table 1: Baseline details demographics of enrolled cases (n=110)

Variable	No.	%
Mean age (years)	47.16±7.53	
Mean BMI (kg/m^2)	26.17±8.44	
Mean weight (kg)	59.16±17.66	
Area		
Urban	65	59.9
Rural	45	40.1
Literacy		
Yes	40	36.4
No	70	63.6
Socioeconomic status		
Low	60	54.5
High	30	45.5

Table 2: Frequency of endometrial hyperplasia and their types (n=110)

Vriable	No.	%
Endometrial hyperplasia		
Yes	25	22.73
No	85	77.27
Types (n=25)		
Cystic hyperplasia	18	72.0
Adenomotous hyperplasia	4	16.0
Typical hyperplasia	3	12.0

Table 3: Pattern of bleeding among endometrial hyperplasia cases (n=25)

Pattern of bleeding	No.	%
Menorrhagia	15	60.0
Polymenorrhea	8	32.0
Polymenorrhagia	2	8.0

Table 4: Association of treatment among cases (n=25)

Treatment	No.	%
Medical	20	80.0
Surgical	5	20.0

DISCUSSION

The prominent health problem in women with multifactorial etiology is abnormal vaginal bleeding. Transvaginal ultrasound can be utilized to diagnose structural reasons of irregular bleeding as a first-line imaging mode.[12] The greatest indicators of eventual endometrial cancer include aging and the spread of the intraepithelial endometrial neoplasia.[13]

In the present study, mean age was 47.16±7.53 years with mean BMI 26.17±8.44 kg/m^2. The findings were comparable to the previous study.[14] This study showed that most of the patients 65 (59.09%) were from urban area and majority of the patients 70 (63.64%) were illiterate. 60 (54.5%) cases were from low socio-economic status and 50 (45.5%) had high socio-economic status. These showed resemblance to the previous report.[14] Babacan et al[15] reported that mean age was 49.5±12.9 years in their patients. In patients of this age the fact that the number of ovarian follicles decreases the menopause occurs, and their gonadotrophic stimulus resistance increases, leading to a low concentration of estrogen level which is insufficient to maintain the typical endometrium development.

This study showed that 22.73% of the females had endometrial hyperplasia. On the other hand, 24.7% endometrial hyperplasia has been described by Muzaffar and others[16] and 30.3% by Wahda et al.[17]

Abid et al[18] reported that 1% among 119 reproductive age groups, of the 77 perimenopausal women with 6.5% endometrial hyperplasia, of the after menopausal women of 13.2%. Munawar et al[19] assessed the causes of bleeding in postmenopausal women and the most common diagnosis was endometrial hyperplasia (48%). Dilation and curettage (D&C) in excessive and atypical uterine bleeding was conducted by Adil[20] for two years in a 2-year trial. 8.8% for adenomatous hyperplasia, incidence of cystic endometrial hyperplasia was 32.8%. It was the most common in our study among endometrial hyperplasia (72%).

In most cystic hyperplasia patients, the bleeding rate is heavy but regular, whereas in complicated, atypical hyperplasia the pattern is irregular and shows the severity of the condition. In our study, 60% of cystic hyperplasia patients only experienced menorrhagia. There was no special value for endometrial hyperplasia diagnoses because four individuals out of 25 had an endometrial thickness of 5 to 6 mm. A research by Bakos and Heimer[21] have found that transvaginal ultrasonography in women with irregular bleeding is as successful as D&C. 76% of endometrial abnormalities may be detected by Doppler endovaginal ultrasound.[22]

In current study, medical treatment was given to 20 (80%) cases and surgical treatment was given to 5

(20%).Management options include stopping exogenous substances and removing oestrogen generating ovarian tumors. The severity of the disease, the age and wishes of patients for future children depend on medical and surgical treatment. For endometrial hyperplasia, short-term usage of Gonadotrophin releasing hormone analog is used. Colacurci et al[23] employed gonadotrophin-releasing short-term (3 months) therapy analogous to women in pre-menopausal conditions. The symptoms were extended, free and there was a low rate of side effects. The identification of endometrial hyperplasia and early treatment remain essential since they represent the antecedents of endometrial cancer.

CONCLUSION

The prevalence of endometrial hyperplasia was 22.73% among women with abnormal bleeding. It can be cure by early diagnosis and treatment.

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