International Journal of Advanced Research in Biological Sciences
ISSN : 2348-8069
www.ijarbs.com

Research Article

Perimenopausal bleeding in Upper Egypt

Mahmoud Edessy, Abd El-Aziz G. El-Darwish, Hossam M. Abd El-Hady, Faisal A. Mustafa and EidAzzam

Obstetrics and Gynecology department – Faculty of Medicine – Al-Azhar University– Assiut –Egypt
*Corresponding author: *aam_nasr@yahoo.com*

Abstract

Objectives:t o assess the prevalence of abnormal uterine bleeding in Giza governate in different age groups(premenopausal and postmenopausal) using 2D transvaginal ultrasonography and histopathological studies. **Methods:**This study was conducted at El-hawamdeya general hospital,Obstetrics and Gynecology department. 200 patients admitted or attended to the outpatient clinic complaining of premenopausal and postmenopausal abnormal uterine bleeding were recreated for this study. **Results**:As regard to 2D transvaginalultrasonography8 (8%) of premenopausal group had Sub mucous fibroid, 14 (14%) had Interstitial fibroid, 8 (8%) had Adenomyosis, 9 (9%) had Simple ovarian Cyst, 2 (2%) had complicated ovarian cyst, 15 (15%) Poly cystic ovary (PCO),while in postmenopausal group: 3 (3%) had Sub mucous fibroid, 2 (2%) had Interstitial fibroid, and no abnormality detected (NAD) in 95 (95%). **Conclusion and Recommendation:** TVS is an easy, safe, rapid and tolerable procedure It has an excellent diagnostic accuracy in the diagnosis of uterine pathology responsible for abnormal uterine bleeding.

Keywords: post menoupause, abnormal uterine bleeding, upper Egypt

Introduction

Abnormal uterine bleeding (AUB) is overall the most common causes of gynecological visits in the perimenopausal and postmenopausal age, involving about 15% of women(1).Any bleeding not fulfilling the normal menstruation pattern is referred to as AUB and includes several clinical features such as oligomenorrhea, polymenorrhea, menorrhagia, menometrorrhagia, metrorrhagia, mid-cycle spotting, dysfunctional uterine bleeding, and post-menopausal bleeding(2).Thus, based on its definition, any bleeding with excessive duration, frequency, and amount in pre- and postmenopausal women is AUB which could be due to several reasons such as organic (endometrial polyps, hyperplasia, myomas, atrophy, and cancer) or non-organic causes (dysfunctional uterine bleeding) (3).

Aim of the study

To assess the prevalence of abnormal uterine bleeding in Giza govern ate in different age group (premenopausal and postmenopausal) using 2D transvaginal ultrasonography and histopathological studies.

Patient and Methods

This study was conducted at El-Hawamdeyageneral hospital,Obstetrics and Gynecology department,the study included 200 patients admitted or attended to the outpatient clinic complaining of premenopausal or postmenopausal abnormal uterine bleeding. Women included in the study were premenopausal 100 (50%) while 100 were post-menopausal (50%).

Inclusion criteria: Patientshaving postmenopausal bleeding (PMB) for 12 months after the last menstrual period,in Reproductive group: patients having any pattern of bleeding e.g., menorrhagia, metrorhagia, menometrorrhgia for more than 3 months.

Exclusion criteria: Patients taking hormonal replacement therapy or other hormonal preparations with a known effect on the endometrium, Patients using hormonal method of contraception, current or suspected pregnancy, vaginal atrophy,vulval or cervical cause of bleeding, having any pathological lesion that distorts the endometrium asseptum and subseptate uterus, contraindicaion for diagnostic modalities (e.g virgin), evident drug intake that can lead to vaginal bleeding as aspirin or anticoagulants and evident general cause that can cause vaginal bleeding.

All patients in the study were submitted to complete history and physical examination,local pelvic examination,routine laboratory investigations includedcomplete blood count (CBC), bleeding and clotting time, fasting and post-prandial blood glucose level, liver and kidney function tests were performed for all patients in the study,2D transvaginal ultrasound examination,histopathological studies were done through dilatation and curettage or hysterectomy specimen.

Statistical analysis:

Data were statistically described in terms of range, mean standard deviation (SD), frequencies and percentages when appropriate,For comparing categorical data, Chi square (^{2}) test was performed, Exact test was used instead when the expected frequency is less than 5, *p* values less than 0.05 was considered statistically significant.

Results and Discussion

In our study two hundred women were included in the study, of these 100 (50.0%) were premenopausal with mean age of 38.28 years and100(50.0%)were postmenopausal with mean age of 56.10 years; the difference between both groups was statistically significant regarding age (p0.000).

In the study by Dangal(4) Eighty-four women were included in the study, Of these 45 (53.5%) were postmenopausal and (%46.5)39were premenopausal, Their age rangedfrom 45 to 81 years with a mean age of 63 years.

In our study, TVUS detected the main pathological lesion of premenopausal group was fibroid 22 (22%)(8 sub mucus,14 interstitial),followed by Poly cystic ovary (PCO) 15 (15%),then Adenomyosis 8 (8%),then Simple ovarian Cyst 9 (9%)and finally complicated ovarian cyst 2 (2%) and no abnormality detected (NAD) in 44(44%),while in postmenopausal group: 5 (5%) had fibroid(3sub mucus,2interstitial) and no abnormality detected (NAD) in 95 (95%) .

In other study by KulsumHaq et al. (5) (42%) had fibroid, (6%) had Adenomyosis.

In our study, histopathological examination in premenopausal group reveals, majority29 (29%) had Normal cyclical pattern of endometrium followed by Simple Endometrial Hyperplasia 23(23%) then Disorderd proliferative endometrium 22 (22%),Endometritis 13 (13%), Endometrial Polyp10(10%), Atrophic endometrium 2 (2%)and finally Endometrial Carcinoma 1 (1%). Other pathological lesions show 26 (26%) had fibroid, 5 (5%) had adenomyosis and 5(5%) had endocervical polyp, While in postmenopausal group, majority 35 (35%) had Endometritis followed by Atrophic endometrium 24 (24%), Simple Endometrial Hyperplasia 20 (2%), Endometrial Carcinoma 16 (16%) and finally Endometrial Polyp 5 (5%). Other pathological lesions show 9 (9%) had fibroid, 10 (10%) had endocervicalpolyp.

Histopathological examination in the study of Dangal(4)majority of cases in premenopausal group 24 (61.5%) showed normal endometrium followed by Endometrial Hyperplasia In 9(23.0%), Endometrial Adenofibroma in 3 (7.7%) and finally Endocervical Carcinoma 1n 3 (7.7%), While in postmenopausal group, majority of cases 29 (64.4%) had Atrophic endometrium followed by 8 (17.7%) had Endometrial Carcinoma, 5 (11.1%) had Endometritis and finally 3 (6.6%) had Endocervical Carcinoma.

In the study of Soleymani E etal. (6) majority of cases in premenopausal group 392 (81.7 %) showed Normal pattern of endometrium followed by 77 (16 %) had Disordered proliferationand polyps, 9 (1.9 %) had Endometrial Hyperplasia and 2 (0.4 %) had

Table (1):Age of the studied groups

	Premenopausal		post-menopausal		Independent t-test	
	Mean	SD	Mean	SD	t	p-value
Age	38.28	8.36	56.10	5.53	-17.779	0.000

Table (2):Transvaginal ultrasonographic finding in the study groups

	Premenopausal		Post-menopausal		Chi-square test	
	no.	%	no.	%	X^2	P-value
Sub mucous fibroid	8	8.00%	3	3.00%	1.539	0.215
Interstitial fibroid	14	14.00%	2	2.00%	8.220	0.004
Adenomyosis	8	8.00%	0	0.00%	6.380	0.016
Simple ovarian Cyst	9	9.00%	0	0.00%	7.446	0.006
complicated ovarian cyst	2	2.00%	0	0.00%	0.505	0.477
PCO	15	15.00%	0	0.00%	14.126	0.000
NAD	44	44.0%	95	95.00%	59.989	0.000

Table (3): Comparison of Histopathological findings between Premenopausal and post-menopausal groups:

		Premenopausal		postmenopausal		Chi-square test	
		No.	%	No.	%	X^2	P-value
Endometrial Histopathology	Normal cyclical pattern	29	29.00%	0	0.00%	31.619	0.000 *
	Disorderd proliferative	22	22.00%	0	0.00%	22.523	0.000 *
	Endometritis	13	13.00%	35	35.00%	9.540	0.002 *
	Simple Endometrial Hyperplasia	23	23.00%	20	20.00%	0.119	0.731
	Endometrial Polyp	10	10.00%	5	5.00%	1.153	0.282
	Atrophic endometrium	2	2.00%	24	24.00%	19.496	0.000 *
	Endometrial Carcinoma	1	1.00%	16	16.00%	12.600	0.000 *
Other Histopathology	Leiomyoma	23	23.00%	9	9.00%	6.287	0.012 *
	Degenerated leiomyoma	3	3.00%	0	0.00%	1.354	0.244
	Adenomyosis	5	5.00%	0	0.00%	3.282	0.070
	Lieomyomatous polyp	2	2.00%	0	0.00%	0.505	0.477
	Chronic cervicitis	9	9.00%	7	7.00%	0.068	0.794
	Benign endocervical polyp	3	3.00%	10	10.00%	2.962	0.085
	Chronic cervicities+ benign endocervical polyp	2	2.00%	0	0.00%	0.505	0.477
	NAD	53	53.00%	74	74.00%	8.629	0.003 *

malignancy While in postmenopausal group89 (80.2 %) had Normal pattern of endometrium followed by 14 (12.6 %) had Disordered proliferationand polyps, 6 (5.4 %) had Endometrial Hyperplasia and 2 (1.8 %) had malignancy.Pasqualotto et al. (7)study on 375 patients complaining of abnormal uterine bleeding and the main pathological findings are endometrial polyps 172 (45.9%) and submucousmyomas 105 (28%) Whereas in the study carried out by Ryu et al. (8)on 105 patients, histopathology revealed the presence of 37 endometrial polyps (35%), 26 submucousmyomas(25%), 12 endometrial hyperplasia (11%), 3 endometrial carcinoma (3%),2adenomyomas (2%), 24 cases (23%) showed no organic lesion.

Histopathological examination in the study of Pyrai et al.(9)showed normal endometrium in 9 cases (18%), myomas in 16 cases (32%), endometrial polyps in 6 cases (12%), endometrial hyperplasia in 11 cases (22%) and endometrial carcinoma in 2 cases (4%).

A higher incidence of malignancy was seen in the postmenopausal group as compared to the premenopausal group (16% Vs 1 %), similar results inDangal(24.3% Vs 7.7%)and inSoleymani E etal. (1.8% vs 0.4%)(4, 6).

Conclusion and recommendation

TVS is an easy, safe, rapid and tolerable procedure it has an excellent diagnostic accuracy in the diagnosis of uterine pathology responsible for abnormal uterine bleeding.2DTVUS reveal that no abnormality detected (NAD) in 44 (44.00%) in premenopausal patients and 95 (95%) in postmenopausal patients,while fibroid was the commonest lesion in premenopausal and postmenopausal patients. The commonest observed histopathology in premenopausal patients was Normal cyclical pattern and fibroid while in postmenopausal patients was endometritis and endocervical polyp.endometrial Carcinoma more common in postmenopausal patients. Considering the pilot nature of this study, further studies with much larger study and control populations are needed to verify its findings.

References

1. Karimzadeh Mohammad Ali M.D,RaziehDehghaniFirouzabadi M.D,Farzaneh Goharzad A: Diagnostic value of saline contrast sonohysterography comparing with hysteroscopy for detecting endometrial abnormalities in women with abnormal uterine bleeding. Iranian Journal of Reproductive Medicine.Summer 2011;Vol.9. No.3. pp.196 -202.

3. Albers J.R, Hull S.K. & Wesley R.M: Abnormal Uterine Bleeding. American Family Physician. 2004; 69(8):1915-1926.

4. Heller DS: Pathologic basis for abnormal uterine bleeding with organic uterine pathologies. Menopause. 2011; 18(4):412–415.

5. Dan galG:A study of endometrium of patients with abnormal uterine bleedingat Chitwan valley. Kathmandu University Medical Journal. 2003; Vol. 1, No. 2: 110-112.

6. KulsumHaq, ShabnomFerdousChowdhury, MaksudaMannan, Rokshana Ivy **&** K. ShehneelaTasnim: Transvaginal ultrasonography is the diagnostic method for evaluation of abnormal uterine bleeding. Journal of ShaheedSuhrawardy Medical College.2009; Vol.1, No.1.

7. EbrahimSoleymani,KatayounZiari,OmidRahmani ,MasoomehDadpay, Maryam Taheri-Dolatabadi,KamyabAlizadeh**&**NahidGhanbarzadeh: Histopathological findings of endometrial specimens in abnormal uterine bleeding. Arch Gynecol Obstet. 2014; 289:845–849.

8. Pasqualotto EB,Margossian H, Price LL**&** Bradley LD: Accuracy of preoperative diagnostic tools and outcome of hysteroscopic management of menstrual dysfunction.Am J AssocGynecolLaparosc. 2000;7(2): 201-209.

9. Ryu J.A, Kim B, Lee J, Kim S. & Lee S.H.: Comparison of transvaginal ultrasonography with hysterosonography as a screening method in patients with abnormal uterine bleeding. Korean Journal of Radiology.2004; 5(1):39-46.

10. Pyari JW, SachanRekha, Srivastava PK,MadhumatiGoll**&** Monika Pandey:A comparative evaluation of hysteroscopy, transvaginal ultrasound and histopathological examination in cases of abnormal uterine bleedingObstet and Gynecology of India. 2006;56(3):242-243.