Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies ***NLM ID:*** *101716117*

Journal home page: www.jamdsr.com doi: 10.21276/jamdsr Index Copernicus value = 85.10

(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

Original Research

Assessment of abnormal uterine bleeding in women with ultrasonograph

Neeta Misra[1]. Kapil Agrawal[2]

[1]Assistant Professor, Department of Obstetrics and Gynaecology, Noida International Institute Of Medical Sciences, Gautam Budh Nagar, Noida, Uttar Pradesh
[2]Assistant Professor, Department of Radiodiagnosis, Noida International Institute Of Medical Sciences, Gautam Budh Nagar, Noida, Uttar Pradesh;

ABSTRACT:
Background: The present study was conducted to assess abnormal uterine bleeding in women.
Materials & Methods: 62 postmenopausal women with bleeding per vagina underwent USG trans-abdominal. Ultrasonographic diagnosis was correlated with histopathological findings.
Results: ET was 1-5 mm in 23, 5-10 mm in 14, 10-15 mm in 10, 15-20 mm in 7, 20-25 mm in 5 and 25-30 mm in 4 patients. The difference was significant (P< 0.05). USG found that lesions were atrophic, endometrial polyp, endocervical polyp, hyperplasia, fibroids and endometrial carcinoma. 21 atrophic had 1-5 mm, 3 had 5-10 mm, 1 had 10-15 mm, 2 had 15-20 mm thickness of ET. 10 endometrial polyp had 1-5 mm, 4 had 5-10 mm and 2 had 15-20 mm ET. 4 endocervical polyp had 1-5 mm, 2 had 10-15 m and 1 had 15-20 mm ET. 2 hyperplasia lesions had 5-10 and 20-25 mm ET respectively. 3 fibroids lesions had 5-10 mm, 3 had 20-25 mm and 2 had 25-30 mm ET. 2 endometrial carcinoma lesions had 5-10 mm ET thickness.
Conclusion: Ultrasonography (USG) can be considered as an initial imaging modality for diagnosing in abnormal uterine bleeding in postmenopausal females.
Key words: Abnormal uterine bleeding, Postmenopausal females, Ultrasonography

Received: August 26, 2020 **Accepted:** October 28, 2020

Corresponding Author: Dr. Kapil Agrawal, Assistant Professor, Department of Radiodiagnosis, Noida International Institute Of Medical Sciences, Gautam Budh Nagar, Noida, Uttar Pradesh, India

This article may be cited as: Misra N, Agrawal K. Assessment of abnormal uterine bleeding in women with ultrasonograph. J Adv Med Dent Scie Res 2020;8(11):189-192.

INTRODUCTION

Post-Menopausal Bleeding (PMB) is defined as uterine bleeding occurring more than 12 months after the last menstrual period. In PMW it is essential to exclude endometrial carcinoma although the incidence is only 6.96 per 1000 women with postmenopausal bleeding.[1] Quality of life is affected as it is associated with pain and discomfort. AUB leads to loss of productivity and may result in surgical intervention including hysterectomy. AUB affects 9 to 14% women between menarche and menopause. In India, the reported prevalence is around 17.9%. AUB patterns include menorrhagia, metrorrhagia, polymenorrhea, dysfunctional uterine bleeding and heavy menstrual bleeding.[2]

A thickened endometrium is the reliable predictor of endometrial diseases, although this sign is sensitive indicator non specificity of this has led most clinicians to use tissue specific techniques such as blind endometrial biopsy or dilatation and curettage as initial screening methods for diagnosis of endometrial diseases.[3] Unfortunately, both these techniques are blind and inexact. Transvaginal sonography (TVS) is an efficient and acceptable non-invasive method for the early detection of endometrial pathology in postmenopausal women.[4] The thickened endometrium during menopause is the most significant

ultrasonographical criterion implicating its pathology. The advantage of USG especially TVS is that it can be performed with empty bladder and is convenient for the patient and at the same time, it is suitable for getting more correct gynecological diagnosis, especially in fatty women with a thick abdomen.[5] The present study was conducted to assess abnormal uterine bleeding in women.

MATERIALS & METHODS

The present study was conducted among 62 postmenopausal women with bleeding per vagina in the department of gynaecology after obtaining their written consent. Ethical clearance was obtained before starting the study.

Data such as name, age etc. was recorded. All patients underwent USG trans-abdominally by curvilinear probes of frequency C5-2 initially with full bladder. Presence of pathological lesions was studied according to the location morphological features, invasion into adjacent myometrium and its vascularity. Ultrasonographic diagnosis was correlated with histopathological findings. Results thus found were statistically studied. P value less than 0.05 was considered significant.

RESULTS

Table I Endometrial Thickness (ET) in patients

Thickness (mm)	Number	P value
1-5	23	0.04
5-10	14	
10-15	10	
15-20	7	
20-25	5	
25-30	4	

Table I, graph I shows that ET was 1-5 mm in 23, 5-10 mm in 14, 10-15 mm in 10, 15-20 mm in 7, 20-25 mm in 5 and 25-30 mm in 4 patients. The difference was significant (P< 0.05).

Graph I Endometrial Thickness (ET) in patients

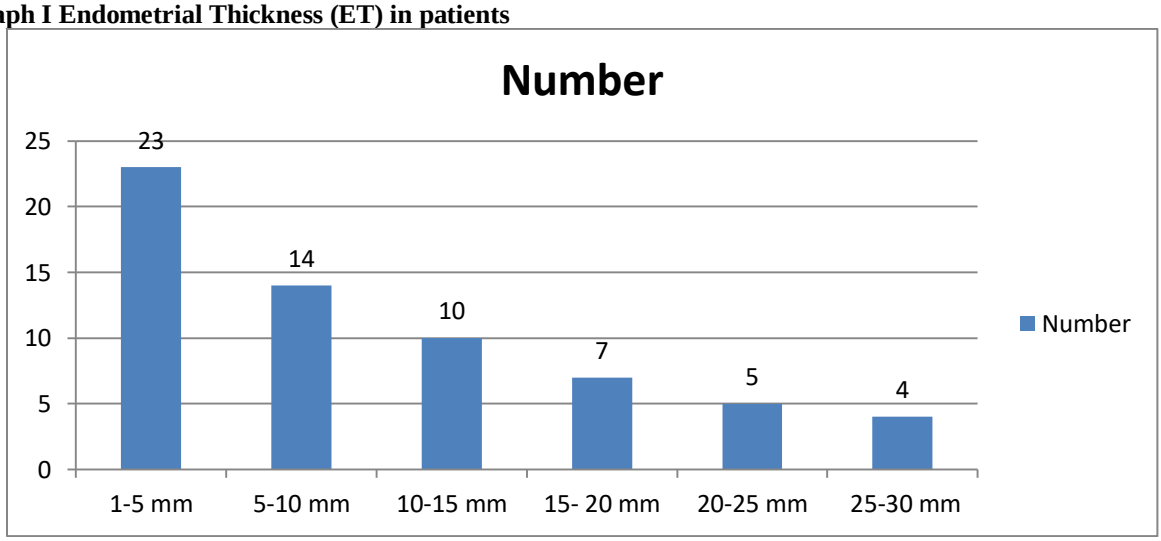

Table II Distribution of patients based on ET detected by USG

Lesions	1-5	5-10	10-15	15-20	20-25	25-30
Atrophic	21	3	1	2	-	-
Endometrial polyp	10	4	-	2	-	-
Endocervical polyp	4	-	2	1	-	-
Hyperplasia	0	2	-	-	2	-
Fibroids	0	3	-	-	3	2
Endometrial carcinoma	0	2	-	-	-	-

Table II shows that USG found that lesions were atrophic, endometrial polyp, endocervical polyp, hyperplasia, fibroids and endometrial carcinoma. 21 atrophic had 1-5 mm, 3 had 5-10 mm, 1 had 10-15 mm, 2 had 15-20 mm thickness of ET. 10 endometrial polyp had 1-5 mm, 4 had 5-10 mm and 2 had 15-20 mm ET. 4 endocervical polyp had 1-5 mm, 2 had 10-15 m and 1 had 15-20 mm ET. 2 hyperplasia lesions had 5-10 and 20-25 mm ET respectively. 3 fibroids lesions had 5-10 mm, 3 had 20-25 mm and 2 had 25-30 mm ET. 2 endometrial carcinoma had 5-10 mm ET thickness.

DISCUSSION

Abnormal uterine bleeding is leading cause of hysterectomy in women. In non-pregnant women, deviations in menstrual flow that exceed patient-perceived normal quantity, duration, regularity, or frequency are considered to be abnormal uterine bleeding (AUB). AUB, which affects up to 14% of reproductive-age women, can significantly impact quality of life.[6] Mood changes, heightened stress, changes in libido, decreased work productivity, and increased financial burden often result. Initially, AUB is divided into two categories.[7] The first category is heavy menstrual bleeding (HMB), which has replaced the term menorrhagia. HMB signifies excessive menstrual bleeding that may reach 80 mL or more.[8] It is important to note that AUB and HMB are based on patient perception of heavy menses and irregularity rather than a specific objective measure.[9] HMB is also a measure of cyclic menses, as opposed to heavy bleeding related to ovulatory dysfunction. Intermenstrual bleeding (IMB), which replaces the previously used term metrorrhagia is considered to be any bleeding that occurs outside of clearly defined cyclic menses.1-3 Once AUB has been categorized as HMB, IMB, or both, it is subcategorized into structural causes (PALM) and nonstructural causes (COEIN).[10] The present study was conducted to assess abnormal uterine bleeding in women.

In present study, endometrial thickness (ET) was 1-5 mm in 23, 5-10 mm in 14, 10-15 mm in 10, 15-20 mm in 7, 20-25 mm in 5 and 25-30 mm in 4 patients. Kadakola et al[11] diagnosed the causes of abnormal uterine bleeding (AUB) in postmenopausal women (PMW) and to correlate it with curettage and histopathological findings, hysteroscopy and thereby minimizing unnecessary interventions in the form of operations and hysteroscopy where sonography depicts normal findings. 58% of the PMW with bleed were in the age group of 51-60 years. Most common cause of PMB was atrophic endometrium (44%), endometrial polyp (22%), followed by malignancy (14%), and hyperplastic endometrium (6%). At Endometrium thickness less than 4 mm there were nil chances of carcinoma.

We found that USG found that lesions were atrophic, endometrial polyp, endocervical polyp, hyperplasia, fibroids and endometrial carcinoma. 21 atrophic had 1-5 mm, 3 had 5-10 mm, 1 had 10-15 mm, 2 had 15-20 mm thickness of ET. 10 endometrial polyp had 1-5 mm, 4 had 5-10 mm and 2 had 15-20 mm ET. 4 endocervical polyp had 1-5 mm, 2 had 10-15 m and 1 had 15-20 mm ET. 2 hyperplasia lesions had 5-10 and 20-25 mm ET respectively. 3 fibroids lesions had 5-10 mm, 3 had 20-25 mm and 2 had 25-30 mm ET. 2 endometrial carcinoma lesions had 5-10 mm ET thickness. Chandniwala et al[12] underwent hysterectomy for abnormal uterine bleeding their clinical findings were related to sonography and histopathology reports. 153 women who have under gone hysterectomy had complaint of menorrhagia and they belong to perimenopausal age group, most of them were between 40-45 years of age. Ultrasonography is suggestive of fibroid in most of the patients and it is most sensitive for diagnosis of uterine fibroid. They observed that Fibroid is a most common cause of AUB. Clinical, sonography and histopathological findings correlated well with the diagnosis.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that ultrasonography (USG) can be considered as an initial imaging modality for diagnosing in abnormal uterine bleeding in postmenopausal females.

REFERENCES

1. Yelamanchi Savitha Devi, Talipeni Swapna K. Diagnostic and Operative Hysteroscopy in The Management of postmenopausal bleeding. J Obstet Gynaecol India. 2001 Mar/Apr;51(2):115-9.
2. Koss LG. Detection of occult endometrial carcinoma. J Cell Biochem. 1995;(Suppl 23):165-73.
3. Medverd JR, Dubinsky TJ. Cost analysis model to compare US versus endometrial biopsy in the evaluation of peri- and postmenopausal abnormal vaginal bleeding. Radiology. 2002;222:619-27.
4. Kaur M, Singh R, Sharma M. Endovaginal sonographic evaluation of postmenopausal uterine bleeding. J Clin Diagn Res. 2010;(4):2175-82.
5. Smith-Bindman R, Kerlikowske K, Feldstein VA, Subak L, Scheidler J, Segal M, et al. Endovaginal ultrasound to exclude endometrial cancer and other endometrial abnormalities. JAMA. 1998;280:1510-7.
6. Schoenfeld A, Levavi H, Hirsch M, Pardo J, Ovadia J. Transvaginal sonography in postmenopausal women. J Clin Ultrasound. 1990;18:350-8.
7. Langlois JP, Turner LF, Aitken PV Jr. Can transvaginal ultrasound detect endometrial disease among asymptomatic postmenopausal patients? J Fam Pract. 2004 Dec;53(12):1003-4.
8. Parazzini F, La Vecchia C, Bocciolone L, Franceschi S. The epidemiology of endometrial cancer. Gynaecol Oncol. 1991;41:1-16.

9. Nasri MN, Coast GJ. Correlation of ultrasound findings and endometrial histopathology in postmenopausal women. Br J Obstet Gynaecol. 1989;96:1333-8.
10. Hunter DC, McClure N. Abnormal uterine bleeding: an evaluation endometrial biopsy, vaginal ultrasound and outpatient hysteroscopy. Ulster Med J. 2001 May;70(1):25-30.
11. Kadakola B, Gurushankar G, Shivamurthy G, Rashmi MN. Ultrasonographic evaluation of abnormal uterine bleeding in postmenopausal women. Int J Reprod Contracept Obstet Gynecol 2015;4:229-34.
12. Chandniwala SI, Jain M. Abnormal uterine bleeding in perimenopausal women: Clinical histopathological and sonography correlation. Indian Journal of Obstetrics and Gynecology Research. 2020 Sep 15;7(3):402-5.