Section: Obstetrics Gynaecology

Original Research Article

TO STUDY AND EVALUATE THE BENIGN, PRE MALIGNANT AND MALIGNANT ENDOMETRIAL ETIOLOGY OF POST MENOPAUSAL BLEEDING PER VAGINUM

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Abstract

Background: Post menopausal bleeding indicates malignancy until proved otherwise. The purpose of the study is to study and evaluate the benign, premalignant and malignant endometrial etiology of post menopausal bleeding per vaginum. **Materials and Methods:** All the post menopausal women presenting with the complaint of bleeding per vaginum were noted, examined and investigated with ultrasonography and endometrial biopsy. Data were collected and percentage of each parameter was calculated and analyzed. **Result:** Incidence of post menopausal bleeding per vaginum is 8.13%. It is found to be more in endometrial thickness more than 4mm. Most common cause of PMB is atrophic endometrium with significant incidence of pre malignant and malignant causes. **Conclusion:** The underlying malignancy as a cause of PBM must be ruled out always. To reduce the incidence of genital tract malignancy in women with PMB, USG assessment of endometrial thickness and endometrial biopsy is recommended.

INTRODUCTION

Postmenopausal bleeding is defined as any bleeding from the genital tract after 1 year of menopause. However, vaginal bleeding occurring any time after 6 months of amenorrhoea in menopausal age should be considered as postmenopausal bleeding and investigated.[1] It is a common gynaecological problem seen in about 5 – 10 % of all gynaecological patients. Endometrial atrophy is the most common cause of vaginal bleeding among postmenopausal women, whereas endometrial hyperplasia and polyps are other common causes.[2] The dictum is "postmenopausal bleeding indicates malignancy until proved otherwise". About 90-95% of postmenopausal women with endometrial cancer experience a vaginal bleeding, whereas about 10% of symptomatic postmenopausal women reveal an intrauterine malignancy.[2] Thickened endometrium may indicate the presence of endometrial pathology. The investigations of PMB are pelvic ultrasound and tissue biopsy. TVS is considered as an acceptable non-invasive initial investigation in women with PMB. Hysteroscopy is considered the gold standard for the diagnosis of cervical and intrauterine pathogenesis, and also has a therapeutic role in different benign lesions.[3] The current study was carried out to evaluate various endometrial causes for Postmenopausal bleeding.

Aims & Objectives

1. To analyse various endometrial causes for postmenopausal bleeding.
2. To differentiate benign and malignant endometrial causes for postmenopausal bleeding histopathologically.

MATERIALS AND METHODS

This is a hospital based prospective observational study conducted in the department of Obstetrics & Gynaecology, ACSR govt medical college and hospital, Nellore over a period of one year from january 2019 to january 2020. 408 post menopausal women with bleeding per vaginum were taken for study.

Inclusion Criteria

1. Postmenopausal women ≥ 40 yrs of age.
2. Amenorrhoea of one year.
3. Postmenopausal women presenting with bleeding per vaginum.

Exclusion Criteria

1. Bleeding disorders.
2. Genital tract and vulval injuries.
3. Vulval, vaginal and cervical lesions (both benign and malignant).

An informed consent was taken and complete medical history was obtained. Physical examination was done. Ultrasonography and endometrial biopsy were taken from women with no obvious cervical growth. Data were collected and tabulated as shown

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in results. Statistical analysis was done in Microsoft Excel. Frequency and percentage of each parameter was calculated and analysed.

RESULTS

Post-menopausal bleeding – Incidence: A total of 5013 women with various gynaecological disorders were seen in both outpatient and inpatient departments during the study period, of which 408 women were presented with post-menopausal bleeding, giving an incidence of 8.13%.

Table 1: PMB – Endometrial thickness

Endometrial thickness (mm)	n/t	%
< 4 mm	138/408	34
4 –10mm	119/408	29
>10mm	151/408	37

Table 2: PMB – Histopathology of Endometrium

Endometrial pathology	n/t	%
Proliferative phase	126/408	31
Atrophic endometrium	140/408	34
Chronic endometritis	20/408	5
Endometrial polyp	53/408	13
Simple hyperplasia without atypia	19/408	4.6
Simple hyperplasia with atypia	11/408	2.6
Complex hyperplasia without atypia	25/408	6.1
Complex hyperplasia with atypia	02/408	0.4
Adenocarcinoma of endometrium	12/408	3

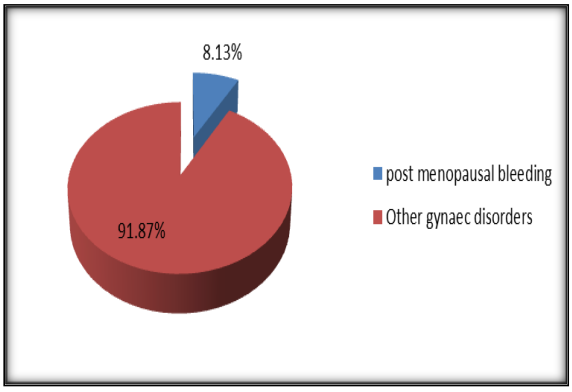

Figure 1:

DISCUSSION

The incidence of post-menopausal bleeding in our study is 8.13% and is correlating with the study done by Hyen Chul Jo et al (10%).[4]

Endometrial Thickness

In the present study, 66% of the women with postmenopausal bleeding had endometrial thickness ≥ 4mm. endometrial thickness < 4mm correlates with low risk of endometrial pathology. If there is diffuse increase in endometrium more than 20 mm, it indicates endometrial pathology. If there is focal increase in thickness, it indicates that there is a possibility of endometrial polyp which can be diagnosed more accurately by sonohysterography.

Benign Endometrial Lesion

Endometrial POLYP: In the present study, 13% of the women with PMB had endometrial polyp, which is correlating with the study done by Ghoubara A et al (14%),[4] and Min Kyoung Kim et al (11%).[8]

Atrophic Endometrium

In the present study, 34% of the women with PMB had atrophic endometrium, which is correlating with the study done by Yi Liang Lee et al (42%).[6]

In the benign endometrial lesions, most common is atrophic endometrium (34%), followed by proliferative endometrium (31%).The sclerotic degeneration of endometrial vessels / local abnormal hemostatic mechanism in the uterus may cause bleeding from the atrophic endometrium.

Proliferative Endometrium

In the present study, 31% of the women with PMB had proliferative endometrium, which is correlating with the study done by Jasmina B et al (35%).[2] In some women, endometrium shows abnormal response to circulating low level of estrogen leading to proliferative endometrium and presents as post-menopausal bleeding.

Premalignant Endometrial Lesion

In the present study, 14% of the women with PMB had pre malignant endometrial lesion, which is correlating with the study done by Ghoubara et al (10%).[4] Endometrial hyperplasia is a premalignant condition which carries both clinical and pathological significance and predisposes to endometrial carcinoma. The risk of endometrial carcinoma is high with atypical changes which require definitive treatment.

Endometrial Carcinoma

In the present study, 3% of the women with PMB had endometrial carcinoma, which is correlating with the study done by Maria BB et al (4.66%),[7] Hyen Chul Jo et al (5.1%),[5] and Min Kyoung Kim et al (5.7%).[8] The risk of endometrial carcinoma increases with age. Approximately 1% of the cases are seen at the age of 50 years which increases to 25% at the age of 80 years. In the present study,

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83% of the endometrial carcinoma was seen in > 70 years of age.

CONCLUSION

PMB is seen in about 5 - 10 % of gynaecological patients. It is important to rule out the underlying malignancy as a cause of post-menopausal bleeding. With the increasing life expectancy after menopause, more and more number of endometrial cancers are to be expected in the future. There is no effective screening programme for endometrial cancer. Women with high risk factors like obesity, Diabetes, women on Tamoxifene or on HRT will require periodic assessment of endometrial thickness and if required, endometrial aspiration cytology is to be done to exclude endometrial pathology. To reduce the incidence of genital tract malignancy in post-menopausal women, regular screening with Pap smear upto the age of 70 years and USG assessment of endometrial thickness upto the age of 80 years is recommended.

REFERENCES

1. Howkins, Bourne. Shaw's Textbook of Gynaecology. Edition - 17th. RELX India Private Limited, New Delhi; 2018. p. 96.
2. Jasmina B, Rupal S. A clinicopathological Evaluation of Postmenopausal Bleeding and Its Correlation with Risk factors for Developing Endometrial Hyperplasia and Cancer: A Hospital -Based Prospective Study. Journal of Mid-Life Health. 2019 oct-Dec;10(4):179-183.
3. Mohamed K, Almandouh HB. Endometrial Evaluation by Transvaginal Ultrasonography Saline Infusion Sonohysterography, Hysteroscopy versus Endometrial Office Biopsy in Perimenopausal Bleeding: A comparative Study. Open Journal of Obstetrics and Gynaecology. 2020 August ;10(8):1093-1106.
4. Ghoubara A, Sundar S, Ewies AAA. Endometrial pathology in recurrent postmenopausal bleeding. University of Birmingham-observational study of 385 women, Birmingham;2018 May 9:1-30.
5. Hyen CJ, Jong CB, Ji Eun P, Ji Kwon P etal. Clinicopathologic Characteristics and Causes of Postmenopausal Bleeding in Older Patients. Annals of Geriatric Medicine and Research. Korea;2018 Nov 23;22(4):189-193.
6. Yi Liang L, Yin SB, Chang SY. Vaginoscopic hysteroscopy in management for women with post-menopausal vaginal bleeding. Taiwanese Journal of Obstetrics & Gynecology. Taiwan;2019 may 12;58:497-500.
7. Maria BB, Katalin V, Mette N. First-time postmenopausal bleeding as a clinical marker of long-term cancer risk: A Danish Nationwide Cohort Study. British Journal of Cancer. 2019 Dec 6;122:445-451.
8. Min KK, Yeon SJ, Seung JC, Bo Hyon Y, etal. Common Causes of Postmenopausal Bleeding in Korean Women: 10-Year Outcomes from a Single Medical Centre. J Korean Med Sci. 2017;32:830-834.

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