



Study of Endometrial Biopsy Specimen in Women with Postmenopausal Bleeding

Authors

Dr Kh. Ambala Devi¹, Dr L. Bimolchandra Singh², Dr Sikha NG³

¹Assistant Professor, Department of Pathology, Regional Institute of Medical Science, Imphal, Manipur

²Associate Professor, Department of Obstetrics & Gynaecology, Regional Institute of Medical Science, Imphal, Manipur

³Senior Resident, Department of Pathology, JNIMS, Imphal, Manipur

Corresponding Author

Dr L. Bimolchandra Singh

Email: dr_bimol@yahoo.com

Abstract

Background: Post menopausal bleeding is a symptom for which medical aid is usually sought as it well known that the cause may be a malignant process. Therefore, slight bleeding in postmenopausal period should be thoroughly investigated. Dilatation and curettage of the uterus remains the most effective method for obtaining endometrial tissue for histologic evaluation.

Methods: This study was conducted in the department of obstetrics and gynaecology, Regional institute of medical science, imphal, Manipur during the period from May 2015 to November 2016. Fifty (50) female patients with post menopausal bleeding attending the Gynaecological outpatient department and the patients who were admitted in the ward were studied. The patient were subjected for collection of endometrial biopsy by conventional dilatation and curretage.

Results: The age of the patients with postmenopausal bleeding ranges from 45 years to 70 years with a mean menopausal age of 48.64 years. The lowest menopausal age in this study was 45 years and the highest 53 years. Maximum postmenopausal bleeders were found in the age group of 48 to 50 years constituting 48 percent. On the basis of the stromal and glandular component, proliferative endometrium was diagnosed in 70 percent, irregular shedding of endometrium in 8 percent, atrophic endometrium in another 8 percent and glandular hyperplasia in 6 percent. There were two percent cases of endometrial carcinoma found in this study.

Conclusion: Any postmenopausal bleeding may be significant and requires a full and complete evaluation. Dilatation and curretage is the most accepted method of evaluation for postmenopausal bleeding but there is a still need for further evaluation of postmenopausal bleeding.

Keywords- Post menopausal bleeding, Dilatation and Curettage, Menopause.

Introduction

Menopause is defined as the permanent cessation of ovarian function. The 'postmenopause' applies to the whole of a women's life after the

menopause, extending into old age when the pathological changes due to loss of ovarian function may become manifest (Davey DA 1996). Thereby the postmenopausal period is associated

with a significant increase in the incidence of age related medical conditions. The age at which menopause is reached varies with geographical, racial, nutritional and socioeconomic conditions. The age of menopause is around 49-50 years in most developed countries and in India it varies from 44 to 50 years (Menon MKK et al 1994). Postmenopausal bleeding is a symptom for which medical aid is usually sought, because it may be due to a malignant process (Procope BJ 1971). Therefore, slight bleeding in postmenopausal period should be thoroughly investigated.

Aims and Objects

1. To evaluate the clinical conditions associated with postmenopausal bleeding of uterine origin.
2. To evaluate the histopathological changes in the endometrial biopsy material with the clinical conditions.

Materials and Methods

This study was done in the department of obstetrics and gynaecology department of Regional institute of medical sciences, Imphal, Manipur during the period extending from April 2015 to September 2016. A total of fifty (50) female patients complaining of postmenopausal bleeding attending the gynaecological outpatient department and the patients who were admitted were studied. A detailed clinical history was taken and through general and systemic examination was done to exclude any systemic disorder using a predesigned proforma. Patients with clinical findings suggestive of carcinoma cervix, vagina and other acute pelvic inflammatory pathology were excluded from this study. Routine investigations of complete blood count, blood for ABO grouping and Rh typing, routine urine examination and blood sugar estimations were done in all cases. Special investigations like ultrasonography, X-ray etc. were done for selected cases. The patients were then subjected for collection of endometrial biopsy by conventional dilatation and curettage (D & C) following proper

vaginal & bimanual examination and tissue collected for histopathological examination. The slides were read and histopathological diagnosis done which were evaluated and correlated with the clinical conditions.

Results and Observations

Table – 1 Age wise distribution of cases

Sl. No.	Age in years	Number	Percentage
1	45-47	13	26
2	48-50	24	48
3	51-53	6	12
4	54-56	3	6
5	57-59	3	6
6	60 and above	1	2
	Total	50	100

Above table shows that maximum patients were from the age group of 48-50 years comprising 48% of cases, followed by age group between 45-47 years comprising 26%.

Table – 2 Distribution of the cases according to parity

Parity	Number	Percentage
Po+o	2	4
P1+0	3	6
P2+0	2	4
P3+0	10	20
P4+0	14	28
P5+0	19	38
Total	50	100

Above table shows maximum no. of patients were grandmultipara comprising 38% and rest constitute 62 percent.

Table – 3 No. of episode of bleeding

No. of bleeding	Number	Percentage
1	20	40%
2	4	8%
3	7	14%
4	9	18%
5	6	12%
6 and more	4	8%
Total	50	100

Above table shows forty percent had continuous bleeding and 60% had interrupted or recurrent bleeding.

Table – 4 Haemoglobin percentage

Hb% (gm%)	Numbers	Percentage
<9	5	10
9-10	24	48
>10	21	42
Total	50	100

Above table shows 48% of the cases were anaemic when 10gm% was taken as baseline of which 10% were below 9 gm% and 48% were between 9gm% and 10gm%.

Table – 5 Uterine size by bimanual palpation

No.	Uterine size	Number	Percentage
1	Atrophied	8	16
2	Normal size	24	48
3	Bulky	12	24
4	6 weeks size	4	8
5	8 weeks size	2	4
Total		50	100

Above table shows increased uterine size in 36%, normal size in 48% and atrophic uterus in 16% respectively.

Table – 6 Uterine length

No.	Uterine length (cm)	Number	Percentage
1	<6 cm	4	8%
2	6-7 cm	28	56%
3	7.1-8 cm	12	24%
4	>8 cm	6	12%
	Total	50	100

Above table shows length of uterus was 6-7 cm in 56%, 7.1-8 cm in 24%, more than 8 cm in 12% and less than 6 cm in 8 percent respectively.

Table -7 Amount of curetting

No.	Amount	Number	Percentage
1	Scanty	26	52%
2	Moderate	20	40%
3	Plenty	4	8%
	Total	50	100

Above table shows the amount of curettings on conventional dilatation and curettage where scanty curette was found in 52% cases, moderate curette in 40% cases and plenty of curette in 8% of cases.

Table 8 Histopathological findings of endometrium

No.	Histopathology	Number	Percentage
1	Proliferative endometrium	35	70
2	Glandular hyperplasia	3	6

3	Adenocarcinoma with focal squamous metaplasia	1	2
4	Secretory endometrium	4	8
5	Irregular shedding of endometrium	2	4
6	Atrophic endometrium	4	8
7	No endometrial tissue	1	2
Total		50	100

Above table shows histopathological findings of endometrium where proliferative endometrium was seen 70% cases, secretory endometrium in 8% cases, atrophic endometrium in 8% and no endometrial tissue in 2% of cases.

Discussion

The age of the patients with menopausal bleeding ranges from 45 years to 70 years with a mean menopausal age of 48.64 years. In this study the lowest menopausal age in this study was 45 years and the highest was 53 years. Maximum postmenopausal bleeders were found in the age group of 48 to 50 years constituting 48 percent. Age group between 45 years to 53 years alone constitute 86%. Similar observations has been reported by Bengtsson C et al (1981) and Menon MKK et al (1994). 38% patients were grandmultiparous. Multiparity is directly related with economic status and gynaecological problems. 70% were from middle socioeconomic status and 30 percent from low socioeconomic status. 64% of cases were from rural and 36% of cases from urban region. Gusberg SB (1976) also stress the importance of disparity between the rich and the poor and geographical location for development of endometrial carcinoma in postmenopausal bleeding. Spotting to scanty flow constitute 72% of the cases, heavy and moderate flow constitute 8% and 20% respectively and these findings correlate with those of Keirse MJNC (1973) and Lidor A et al (1986). Pain lower abdomen and backache constitutes 50% of cases, which were more in large size uterus and increased during bleeding episode. General weakness was found in 8% of cases mainly due to

anaemia. Vaginal infection was found in 4% of cases who were all diabetic. Almost similar findings was observed by Sutherland AM et al. Uterine size were of normal size in 48% of cases followed by bulky uterus in 24% of cases. Atrophic uterus was found in 16% and 6 weeks size and 8 weeks size uterus constituting 8% and 4% of cases respectively. Miyazawa K(1983) found similar findings in his study. The endometrial curette was scanty in 52% of cases which may be due to atrophic nature of endometrium, moderate in 40% of cases and plenty in 8% of cases. Similar observation have been found by Lidor A et al (1986) and Gredmark T et al (1995). Histopathological examination of the endometrium shows proliferative endometrium in 70% of cases due to the anovulatory status of the endometrium in the postmenopausal patients and similar findings were observed by Merrill JA (1981). Atrophic endometrium was found in 8% of cases and glandular hyperplasia in another 6% of cases. Similar findings were also observed by Gredmark T et al (1995) and Debnath S et all (1994). There was one case of endometrial carcinoma found in this study and similar observation was made by Miyazawa K (1983).

Conclusion

Postmenopausal bleeding has become one of the most common clinical problem and it requires a full and complete evaluation. The primary goal in management is to ensure an absence of malignancy and further to identify and treat higher risk groups, such as patients with endometrial hyperplasia, among postmenopausal bleeders. Transvaginal sonography used in adjunction with dilatation and curettage is a reliable tool to diagnose other pelvic pathologies and endometrial abnormalities in postmenopausal bleeding and must be followed up at regular periods.

References

1. DA Davey, The menopause and climacteric, Dewhurst's Textbook of obstetrics and gynaecology for

- postgraduates (Whitfield CR. Blackwell Science Ltd., Oxford, Fifth edition.; 609-641,1996).
2. S Debnath, R Gita, R Arora, and P Rajaram P, Study of gynaecological problems in postmenopausal women, J. Obst. Gynae. India, 44, 1994, 286-289.
3. T Gredmark, S Kvint, G Havel, and LA Mattson, Histopathological findings in women with postmenopausal bleeding, J. Br. Obst. Gynae, 102,1995,133-136.
4. SB Gusberg, The individual at high risk for endometrial carcinoma. Am. J. Obst. & Gynae,126, 1976, 535-541.
5. MJNC Keirse, Aetiology of postmenopausal bleeding, Post graduate Medical Journal, 49, 1973, 344-348.
6. A Lidor, B Ismajovich, E Confino, and MP David, Histopathological findings in 226 women with postmenopausal uterine bleeding, Acta Obstet. Gynaecol. Scand., 65, 1986, 41.
7. MKK Menon, PK Devi, and KB Rao, Menopause and its problem, Postgraduate Obstetrics and Gynaecology(Orient Longman, Fourth edition, 421-429,1994).
8. JA Merril, Management of postmenopausal bleeding, Clin. Obstet. Gynaecol., 24, 1981, 285-299.
9. K Miyazawa, Clinical significance of an enlarged uterus in patients with postmenopausal bleeding, Am. J. Obst. & Gynae., 61,1983, 148-152.
10. AM Sutherland, and JM McBride, Postmenopausal bleeding associated with endometrial hyperplasia, J. Obstet. Gynaecol. Br. Emp.,61, 1954, 238-243.