

The Pattern of Histo-Pathological Diagnosis in Sudanese Women with Postmenopausal Bleeding

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Discussion

The World Health Organization (WHO) estimates that by the year 2030 approximately 1.2 billion of women will be aged over 50 years [1,2]. As a result of this fact, the programme managers and researchers are invited to the health needs of women in menopause incorporated as an essential item in health research and public health programs. The

aim of this study was to investigate the histopathological pattern and risk of malignancy among women presented with postmenopausal bleeding (PMB) at Omdurman Maternity Hospital, Sudan. Data was collected prospectively from 140 patients with PMB during the period of 1st January 2015-31st December 2015 and we excluded those with premature menopause whether surgical or natural, age less than 50 years and patients on hormone replacement therapy.

Clinical details of the patients were obtained; Figure 1 showed the clinical approach to the investigated patients.

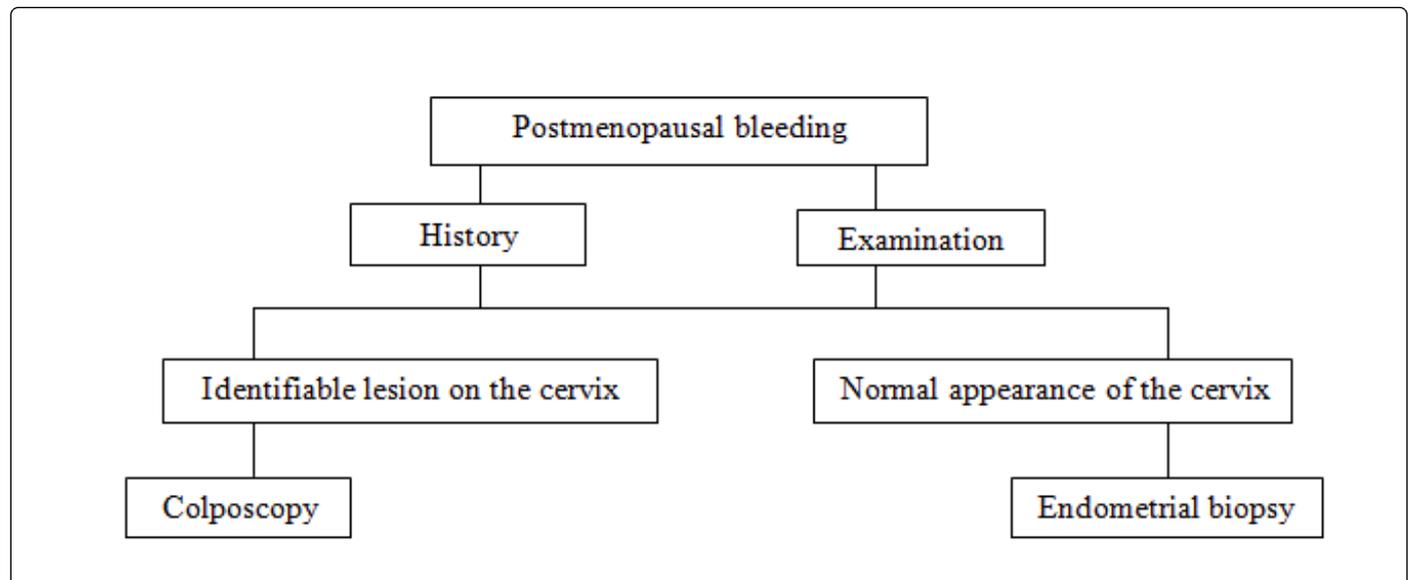


Figure 1: Diagnostic approach to postmenopausal bleeding.

The endometrial curettage and cervical biopsy material was immediately fixed in 10% fresh formalin. The tissue pieces were processed routinely and were stained with haematoxylin and eosin and the histological findings were noted. All the included women were evaluated clinically by Gynaecologist and Transvaginal (HDI 5000 or HDI-Ultra mark) Ultrasound was performed by expert to evaluate the endometrial thickness.

The different variables were compared between the different groups of women based on the histopathological pattern and $P < 0.05$ was considered significant. The study received ethical clearance from the Sudan Medical Specialization Board (SMSB), Department of Obstetrics and Gynaecology.

During the study period a total of 140 patients with PMB were enrolled. Their age ranged between 50-64 year with mean (SD) 58.6(6.3). Their mean (SD) parity and BMI was 7.6(2.7) and 26.9(5.7) respectively. The majorities were married (102, 72.8%) of less than secondary education (92, 65.7%), and of urban residence (127, 90.7%).

Of the total respondents 43(30.7%), 19(13.5%), 45(32.1%), 20(14.2%) and 3(2.1%) gave history of PMB, diabetes mellitus, hypertension, hypothyroidism and active smoking respectively. Only 1(0.7%) woman had history of cervical smear. With regard to findings of speculum examination, 115(82.1%) of women had normal cervical appearance and 25(17.9%) women had abnormal cervical appearance. Based on TVS; 79(56.4%) women had endometrial thickness of 5 mm

and more while 61(43.6%) women had endometrial thickness of less than 5 mm.

The histopathological results for women who presented with postmenopausal bleeding was broad. Most of the women with PMB have benign disease. Benign, precancerous and malignant conditions was found in 87(62.2%), 10(7.1%) and 43(30.7%) women respectively. The histopathological appearance of the 140 women with PMB was as follow:

Endometrial polyp 30(21.4%), Atrophic endometrium 25(17.8%), Endometrial cancer 23(16.4%), Normal endometrium 21(15%), Cervical cancer 20(14.3%), Endometrial hyperplasia with or without

atypia 13(9.3%), Chronic endometritis 4(2.9%) and insufficient for diagnosis 4(2.9%).

Obese patients (BMI=31.5(3.8)) and those who have history of postmenopausal bleeding were significantly had higher incidence of endometrial cancer. In this study the endometrial cancer was observed in women with advanced age (68 ± 7.2 year).

In this study benign causes were most frequent than malignant causes for PMB. However endometrial and cervical cancers were reported in 16.43% and 14.29% of the investigated women respectively (Table 1).

Variable	Normal Endometrium (N=21)	Endometrial Cancer (N=23)	Cervical Cancer (N=20)	P
Age	58.6 (6.7)	68.3 (7.2)	57.3 (6.9)	0.01
Parity	6.3 (3.3)	6.5 (2.9)	6.1 (3.2)	0.251
BMI	22.3 (4.4)	31.5 (3.8)	22 (3.1)	0.002
Urban residence	20(95.2%)	22(95.6%)	18 (90%)	0.51
Smoking, yes	1 (4.7%)	2 (8.6%)	0 (00)	0.621
Diabetes Mellitus	6(28.3%)	7(30.4%)	5 (25%)	0.534
PMB	1 (4.7%)	10 (43.4%)	3 (15%)	0.533

Table 1: Comparison between normal and malignant histopathological findings in Sudanese women presented with postmenopausal bleeding. (BMI: Body mass index, PMB: postmenopausal bleeding). Data is shown as mean (SD) and number (%) as applicable.

The health of menopausal women is a very big concern in the community and many studies were conducted in this field [3-5].

Postmenopausal bleeding is alarming sign that may be associated with cervical or uterine malignancy. Postmenopausal uterine bleeding is etiologically associated with endometrial cancer in 10 to 30% of cases [6]. In the present study the endometrial cancer was observed with advanced age (mean \pm SD 68.3 ± 7.2 year). In agreement with our results an increasing incidence of endometrial malignancy in advanced aged and obese women has been demonstrated before [7].

Our results showed high incidence rate of cervical cancer and almost all of our patients have no history of cervical screening. Cervical cancer is largely preventable by effective screening programs and considerable reduction in cervical cancer incidence and deaths has been achieved in developed nation with systematic cytology screening program [8,9]. These programs have not been possible to be organized in most low resource setting [10].

In conclusion high incidence of endometrial and cervical cancer was reported among Sudanese women presented with PMB. Although the discussions about endometrial screening in menopause is controversial, it might be of great benefit if screening programme is adopted using endometrial biopsy in particular among high risk patients [11,12].

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