

# Clinical Characteristics of Patients with Postmenopausal Bleeding

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**Abstract:** *Postmenopausal bleeding is an episode of bleeding 12 months or more after the last menstrual period. The aim of the study was to ascertain aetiological factors of postmenopausal bleeding. This is a retrospective cohort study of 102 patients admitted over the period 2012 and May 2014 to the Obstetric Gynecologic University Hospital "Queen Geraldine", in Tirana, Albania. Consecutive endometrial and endocervical biopsy specimens with clinical history of PMB, received over a period of one year, were included. Scanty biopsy specimens and poorly fixed specimens were excluded. Of pathologies 88% were benign while 12% were malignant. Patients at 55-64 years of age were the mostly affected women by postmenopausal bleeding whether due to benign or malignant pathology. Malignant pathologies found were endometrial carcinoma (54.5%) & cervical carcinoma (45.5%). These pathologies found mostly in patients aged 55-64 years. According to differentiation degree of endometrial cancer, 34.3% of patients were well differentiated, 50.2% were moderately differentiated, and in 15.5% it was a poor differentiated tumor. A more thorough examination and specific management should be carried out for a woman who presents with PMB and increased endometrial thickness using hysteroscopic assessment and other investigations.*

**Keywords:** postmenopausal bleeding, benign, malignant, pathologies

## 1. Introduction

Postmenopausal bleeding is an episode of bleeding 12 months or more after the last menstrual period. It is one of the most common reasons for referral to the gynaecology department (1,2). All women with postmenopausal bleeding should be referred urgently, endometrial cancer is present in approximately 10% of cases. Postmenopausal bleeding is a common problem and occurs in up to 10% of women aged over 55 years. The majority of cases have a benign cause. There is no evidence to indicate whether different patterns of postmenopausal bleeding such as one-off bleeding or more frequent bleeds are more likely to be associated with malignancy. endometrium, whether they are benign or malignant. Of postmenopausal women with vaginal bleeding, 10%–15% have endometrial carcinoma (3). In contrast, the prevalence of endometrial polyps in patients with PMB and an increased endometrial thickness measured with transvaginal sonography (TVS) is estimated to be around 40% (4). Endometrial cancer is the most common malignancy of the female genital tract in developed countries (5,6). Unlike other malignancies, endometrial cancer often presents at an early stage when there is a possibility of curative treatment by hysterectomy. Survival decreases with increased staging and lower histological differentiation, thus accurate and timely diagnosis is important and should preferably be carried out by a safe, simple and minimally invasive method. Guidelines addressing PMB are therefore aimed at excluding cervical cancer, endometrial carcinoma or precancerous lesions of the endometrium (7). The aim of assessment and investigation of postmenopausal bleeding is to identify a cause and exclude cancer. Assessment should start by taking a detailed history with identification of risk factors for endometrial cancer as well as a medication history covering use of HRT, tamoxifen and anticoagulants (8). Abdominal and pelvic examinations should be carried out to look for masses. Speculum examination should be performed to see if a source of bleeding can be identified, assess atrophic

changes in the vagina and look for evidence of cervical malignancy or polyps. The woman is usually clear where the bleeding has come from i.e. from the vagina, urethra or rectum. When there is uncertainty about the origin of the bleeding a tampon can be inserted to confirm the bleeding is vaginal rather than rectal or urethral. If a source of bleeding is identified on speculum, treatment for this should be initiated. The woman should have an ultrasound scan arranged to check the endometrial thickness. If the endometrial thickness is taken (9). All women who have an episode of postmenopausal bleeding should be seen under the two-week referral rule. Endometrial cancer should be excluded. Ultrasound scan and endometrial biopsy are complementary (10). Ultrasound scan can define endometrial thickness and identify structural abnormalities of the uterus, endometrium and ovaries. Endometrial biopsy provides a histological diagnosis (13). The aim of the study was to ascertain aetiological factors of postmenopausal bleeding.

## 2. Material and Methods

This is a retrospective cohort study of 102 patients admitted over the period 2012 and May 2014 to the Obstetric Gynecologic University Hospital "Queen Geraldine", in Tirana, Albania. Consecutive endometrial and endocervical biopsy specimens with clinical history of PMB, received over a period of one year, were included. Scanty biopsy specimens and poorly fixed specimens were excluded. All postmenopausal women presenting through emergency or outpatient department, with complaint of bleeding per vaginum, with their last menstrual period 1 year back or who were  $\geq 55$  years old were considered eligible for participation after informed consent, irrespective of their parity, social background, previous medical, surgical or gynaecological history. Patients having premature menopause (before 40 year age), surgical induced menopause, radiation induced menopause and chemotherapy induced menopause, those on HRT were excluded from the study. A full history of the

patients was obtained. The name, age, parity, marital status (including husband name), address of the patients were noted (12). Details regarding vaginal bleeding were recorded. These included the timing of its onset, duration, colour and whether or not associated with passage of clots. History of associated symptoms included presence of any vaginal discharge, abdominal masses or distension, any accompanying abdominal pain or backache or a feeling of heaviness or something coming out of vagina. A history of recent weight loss or anorexia was noted as well as presence of any accompanying bowel or urinary symptoms. Treatments taken for the complaints were noted. Drug history especially that of HRT, tamoxifen was also noted. Information regarding obstetrical history was obtained. Gynaecological history included details about age at menarche and menopause, menstrual cycle, contraceptive history coital history (also about post coital bleeding) and details regarding cervical smears were recorded. Family history of carcinoma breast, carcinoma endometrium, carcinoma ovary.

### 3. Results and Discussion

Ages of patients with postmenopausal bleeding ranged between 43 years and 80 years with a mean age of  $58.3 \pm 8.4$  years. The maximum number of cases 38 (27.15%) were between the age group 51 and 55.

The mean parity of cases was 2.7. Age at menarche of patients who presented with postmenopausal bleeding ranged from 14-20 years. Of pathologies 88% were benign while 12% were malignant (fig. 1). Patients at 55-64 years of age were the mostly affected women by postmenopausal bleeding whether due to benign or malignant pathology. Endometrial atrophy was the most frequent benign pathology found. Transvaginal ultrasound examination showed that average length of uterus was 5.81 cm (minimal length 3 cm and maximal length 12 cm). Average thickness of endometrium was 12.65 mm (minimal measured thickness was 4 mm and maximal was 50 mm). Others include endometrial hyperplasia, endometrial polyp, cervicitis, cervical ectropion, cervical polyp, vaginal ulcer & cervical dysplasia. Malignant pathologies found were endometrial carcinoma (54.5%) & cervical carcinoma (45.5%). These pathologies found mostly in patients aged 55-64 years (13). According to differentiation degree of endometrial cancer, 34.3% of patients were well differentiated, 50.2% were moderately differentiated, and in 15.5% it was a poor differentiated tumor (fig. 2). Postmenopausal bleeding is frequent in gynaecology and accounts approximately 3% of postmenopausal women (14). This symptom can reveal benign causes as well as cancers. The primary aim is to identify and exclude atypical hyperplasia and endometrial carcinoma. The risk of endometrial carcinoma in women with postmenopausal bleeding rises with age from 1% at the age of 50 years to approximately 25% at the age of 80 years (15,6). Early marriage, early child bearing, high parity, illiteracy & poor socioeconomic status are all high risk factors for cervical cancer. Nulliparity, early menarche, chronic anovulation, late menopause, unopposed endogenous and exogenous oestrogens and Tamoxifen therapy have all been proven to be risk factors for the development of endometrial

hyperplasia and carcinoma (17). Likewise obesity, diabetes mellitus and hypertension have been associated with endometrial carcinoma.

### 4. Conclusion

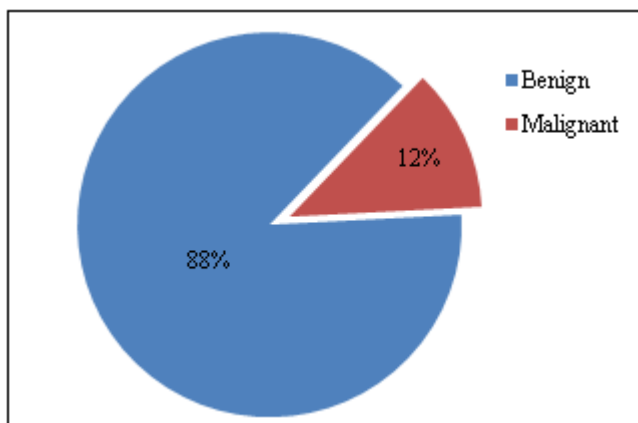
Women with a thick endometrial thickness ( $>4$  mm) or histopathology showing a proliferative at the initial assessment are especially at risk. A more thorough examination and specific management should be carried out for a woman who presents with PMB and increased endometrial thickness using hysteroscopic assessment and other investigations. Women with recurrent PMB after an initial negative assessment should be re-investigated because they may still have significant genital tract pathology. Regular follow-up of all women for a longer period of time may detect more women harbouring endometrial cancer or hyperplasia, when they experience recurrent PMB. Such a policy may improve the ability to predict these diseases.

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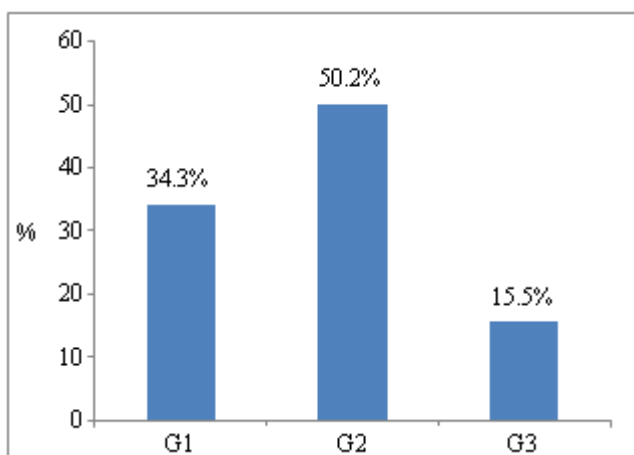
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**Figure 1:** Type of pathologies



**Figure 2:** Differentiation degree of endometrial cancer tumor cells