Post-Menopasual Bleeding

By Edwin S. Grech M.D., B. Pharm., D.(Obst.) R.C.O.G., M.R.C.O.G.

The term post-menopasual bleeding implies a resumption of uterine bleeding after the last menstruation. This time limit, however is arbitrary, and some authors prefer to reduce the period to 6 months. Although post-menopasual bleeding has specific reference to bleeding from the uterus, the term is widely used to include other sources.

Bleeding occuring after the menopause is even much more sinister than irregular pre-menopasual bleeding. All the authors agree that vaginal bleeding after the termination of the normal menstrual life of a woman is a symptom calling for serious consideration. Experience has taught us that the underlying pathological condition is often some form of malignancy. Te Linde (1930) says that so firmly has this idea been fixed in our minds, that we are prone to forget that, fortunately, not a few benign pelvic conditions may be responsible for this symptom.

It can be seen from table (I) that more recently reported series reveal a lower incidence of genital malignancy. This probably does not reflect a decrease in malignancy but rather a great awareness of the significance of post-menopasual bleeding with consequent increase of such patients hospitalized for diagnosis. Although the incidence of post-menopasual bleeding due to malignancy is now approximately one half that of 25 years ago, it remains sufficiently high to require complete investigation.

Table 1. Incidence per cent of Pathological Conditions

Authors	Malignant	Benign	Unknown
Te Linde (1930)	60	40	—
Brewer & Miller (1954)	27.5	34.1	38.4
Jones & Mahoney (1957)	30	70	—
Payne et al. (1959)	30	58	12
Personal series	23.8	47.6	28.5

I followed a whole year's admissions into the gynaecological wards of a large general hospital. There were 1,369 patients admitted; 63 of these were for investigation of post-menopasual bleeding, showing an incidence of 4.6% of the total number of admissions. Malignancy was found in 15 cases, an incidence of 23.4% or 1.2% of the total admissions. The arbitrary time limit of amenorrhoea was taken as 6 months or more.

The character of the bleeding varied in degree from spotting or scanty flow to moderate, profuse or gushing. Spotting and scanty flow are the most frequent types whether the lesion is benign or malignant. Brewer and Miller (1954) noticed that gushing was approximately 4 times as frequent in patients with uterine malignancies. However, neither the character nor the duration of the bleeding reflect the clinical extent of the pathological lesion.

Aetiology

The possible causes of post-menopausal bleeding will now be discussed. Except for the senile states they apply equally to pre-menopausal bleeding. Table (II.) shows the various causes of bleeding in the series analysed.

Table II. Causes of post-menopausal bleeding in 63 cases

Pathological lesion	Number of cases
Malignancy of vulva, cervix, uterus, tubes.	14
Innocent neoplasms of vulva, cervix, uterus, tubes.	13
Ovarian tumours.	1
Infections.	7
Dysfunctional uterine haemorrhage.	4

Trauma.	2
Haemorrhage from urethra, bladder, rectum.	3
Oestrogen therapy.	1
Unknown.	18

1. Malignant neoplasms of the vulva, cervix, uterus and tubes. There were 14 such cases, an incidence of 22.2%. By far the more common malignancies associated with uterine bleeding in this group are those occuring in the cervix or endometrium. Carcinoma of the cervix is in general the more common lesion amongst post-menopausal women. However, Norris (1935) observed that the relative incidence of fundal carcinoma after the menopause has been established, increases and practically parallels that of the cervix. In this series there were 9 cases of endometrial carcinoma, while only 5 were cervical. There was one other case in which the primary growth was situated in the bladder, but the bleeding was from the vaginal metastasis.

Carcinoma of the Fallopian tubes is a rare cause of post-menopausal bleeding. It has a very high mortality because it is a silent grower. Frequently the first and only symptom is a blood-stained discharge. When no uterine abnormality is found to account for the bleeding this condition must be kept in mind.

It is interesting to note that the longer the period of amenorrhoea the higher is the inicdence of malignancy. In this series 11 of the malignant cases had the bleeding after more than three years of amenorrhoea, giving an incidence of 73.3%. In 7 of these cases the bleeding occured after 10 to 18 years, while in 2 others the bleeding occured after 8 years.

2. Innocent neoplasms of the vulva, cervix, uterus and tubes. Endometrial and cervical polyps are the most common benign tumours responsible for post-menopausal bleeding. Though they are generally benign they should always be examined histologically for any malignant changes.

In this series there was one case in which a fibro-myoma was palpable, with no other cause for the bleeding being present. Uterine fibromyomata seldom cause post-menopausal bleeding. When they co-exist with such bleeding, the possibility of a sarcomataus change must be considered. Necrosis and ulceration in a submucous myoma may also cause bleeding.

3. Ovarian Tumours. Ovarian tumours, whether benign or malignant do not usually affect the menstrual function unless they happen to have a sex endocrine function. However, occasionally some cases of large tumours disturb the vascularity of the pelvic organs so much that abnormal uterine haemorrhage and even post-menopausal bleeding can occur. (Jeffcoate 1957). Bleeding associated with malignant ovarian tumours usually occurs when the neoplasm is advanced. This is probably due to bloody ascitic fluid discharging through the tubes and into the uterus or by an extension of the malignant growth into the uterine cavity.

There was only one ovarian cyst in this series, which was a benign serous cystadenoma.

In cases in which curettage reveals hyperplasia of the endometrium the presence of a small granulosa or theca cell tumour should be kept in mind. Any woman bleeding after a period of amenorrhoea of more than 3 years, in whom hyperplasia of the endometrium is found and provided she had received no oestrogens, should have an exploratory laparatomy, whether a palpable adnexal mass is present or not.

4. Infections. There were 4 cases of senile vaginitis and in 3 others the only pathological lesion was a cervical erosion. Cervicitis and cervical erosion rarely if ever cause post-menopausal

bleeding. Any bleeding lesion from the cervix must be considered malignant until proved otherwise.

Post-menopausal vaginitis is a common cause of bleeding in the elderly woman. The patient presents with a blood-stained discharge; sometimes there is bright, fairly profuse bleeding from vascularised adhesions in the senile vagina. The latter very often follows coitus. Speculum examination will usually disclose the bleeding spots in the vagina.

5. Hyperplasia of the endometrium. This may be another cause of bleeding in the post-menopausal woman. It is brought about either by a recrudescence of ovarian function or due to extra-ovarian oetrogens. The cause of hyperplasia of the endometrium is the absence of the influence excited by the corpus luteum and a persistence of the follicular influence. In metropathia haemorrhagica or retrogressive hyperplasia, of which there were 4 cases in this series (an incidence of 6.2%) the 'Swiss cheese' pattern persists, but the stroma is atrophic or even fibrotic. This is an inactive process and should be distinguished from active hyperplasia. The latter suggests that the stimulus producing hyperplasia is still operative. Novak (1956) is of the opinion that active post-menopausal hyperplasia may be looked upon as a pre-cancerous lesion because of the frequent co-existence of the two conditions. The gradations between very active hyperplasia of the endometrium and adenocarcinoma is not always histologically distinct. Although hyperplasia and adenocarcinoma may co-exist, the latter can certainly develop in an atrophic endometrium.

6. Injuries. Two cases in this series were found to be due to cervical and vaginal ulcerations caused by a neglected pessary. Other causes of bleeding due to trauma may be decubital ulceration or post-radiation ulceration.

7. Haemorrhage from urethra, bladder and rectum. These cases are usually mistaken for vaginal bleeding. There were three such cases, two of which bled from a urethral caruncle, and the third had carcinoma of the bladder with vaginal metastasis.

8. Oestrogen therapy. Most recent authors agree that the most frequent cause of post-menopausal bleeding is probably oestrogen therapy. This could not be shown in this series, since the information is hardly ever volunteered by the patient or general practioner and very rarely asked for during history-taking. In general, however, it must not be assumed that the bleeding is due to oestrogen therapy, even if the patient gives such a history. While oestrogen medication has never been proved to cause genital malignancy, it has never been considered to be a deterrent to its development. For this reason and because it merely drags out the menopause, the routine or prolonged administration of oestrogens in post-menopausal women is most undesirable.

9. Diseases of the blood with coagulation defects. Blood dyscrasias are uncommon causes of uterine bleeding. The use of anticoagulants for such conditions as coroanry disease or thrombophlebitis may occasionally be responsible for some bleeding.

10. Unknown cause. There were 18 cases (28.5%) in which no cause could be found.

Relation to systematic disease.

About two thirds of the cases were found to have some form of systemic disease, of which hypertensive cardiovascular disease was the most common, being in 42 of the cases. Diabetes was present in 3 cases, one of which proved to have carcinoma of the endometrium. The association of systemic disease

may have an effect on the management of these patients.

Management

Post-menopausal bleeding or discharge calls for immediate investigation, even if it is a single episode. A careful history is taken in the clinic. It is important to enquire whether the patient was having any oestrogen medication beforehand. Even if this was being given, it must not be assumed that it is the cause of the bleeding.

Diagnostic curettage. Examination under anaesthesia, diagnostic curettage and possibly cervical biopsy are necessary in every case. This should be done even if the vaginal and cervical smears are negative for cancer cells. Curettage is not infallible since it has been shown that 5-10% of endometrial carcinoma can and are missed by the curette. However, a thorough curettage under general anaesthesia remains the more desirable and more direct approach in the investigation of these cases.

The presence of a cervical polyp or senile vaginitis does not exclude the presence of carcinoma of the uterus. When a cause is found treatment is directed to it.

When no cause for the bleeding is found, usually 20-50% of cases, it is reasonable to wait events. These cases should be followed up for at least six months to see whether the bleeding recurs. At each visit the history is reviewed, the patient is re-examined, and smears for cytology taken if necessary. Even if curettage gives negative results, the recurrence or persistence of bleeding or discharge always calls for a laparotomy. This may be the only way of detecting an early carcinoma of the uterus, tube or ovary.

Exfoliative cytopathology. The Papanicolaou smear is nowadays being performed as a routine investigation in several units. Exfoliative cytopathology is still in its infancy and so not without imperfections. A negative smear should not give one a sense of security, especially when considering endometrial carcinoma. False negative smears are much more common in the presence of endometrial carcinoma than they are in carcinoma of the cervix. The reason for this is two-fold. Firstly the individual cells in endometrial cancer are often much less malignant looking than the cells in epidermoid carminoma. Secondly, cervical stenosis of various degrees occurs in post-menopausal women and so few or even none of the malignant cells find their way into the vagina. The cytosmear is definitely more reliable and useful in cervical carcinoma.

References

1. Te Linde R.W. (1930). South. M. J., 23,571.
2. Brewer J. & Miller W.H. (1954). Am. J. Obst. Gynec., 67,988.
3. Nicholson Jones W. & Mahoney P.L. (1957). Am. Surg., 23,58.
4. Payne F.L. & al (1959). Am. J. Obst., 77,6,1,216.
5. Jeffcoate T.N.A. (1957). Principles of Gynaecology. P. 498.
6. Novak E.R. (1956). Am. J. Obst. Gynec. 71,1,312.