ABNORMAL VAGINAL BLEEDING

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This article deals with the management of abnormal vaginal bleeding unrelated to pregnancy. Amenorrhoea, and abnormal bleeding in pregnancy, would require separate articles.

It is easiest to consider abnormal vaginal bleeding in three age groups – prepubertal, reproductive and postmenopausal.

PREPUBERTAL

It is quite common for a neonate to develop a blood-stained vaginal loss up to 48 hours after birth. This is due to loss of the transplacental oestrogen stimulation from the mother. No investigations or treatment are required, beyond simple explanation of this physiological event.

During childhood, vaginal bleeding can occur secondary to atrophic vaginitis (as in the postmenopausal woman) or be due to the presence of a foreign body or cancer. Any child who has vaginal bleeding or a blood-stained vaginal discharge should therefore be referred for specialist assessment, which will usually involve examination under anaesthesia.

If the cause is atrophic vaginitis treatment is rarely necessary, and a foreign body would be removed when found. The cancers that can present are endodermal sinus tumour (a primitive adenocarcinoma) and rhabdomyosarcoma (sarcoma botryoides). Surgery has been the mainstay of treatment but the results were usually poor. Recent improvements in survival have been shown with combination chemotherapy[1].

REPRODUCTIVE

At least 20% of women consult their GP at some stage complaining of a perceived abnormality with their periods. In some cases this is objective (e.g. post-coital bleeding (PCB), intermenstrual bleeding (IMB)) but in many cases it is subjective and relates to the duration or heaviness of their loss.

A full history is required to try to determine exactly what the problem is, and I would suggest that it is more useful to describe the problem in full than to use abbreviations such as menorrhagia. A menstrual chart is often helpful in clarifying the woman's symptoms. Particular attention should be paid to the woman's age, her recent menstrual history, drug and contraceptive history, when she last had a cervical smear and (if she complains of heavy periods) exactly how heavy the loss is. This can be assessed more accurately by the use of a pictorial scheme[2] (figure 1).

A general, abdominal and pelvic examination should then be performed to try to detect or exclude the common causes of such symptoms (Table 1). Where appropriate a cervical smear can be taken. If a cervical polyp is present, and is thought to be the cause of IMB or PCB, it can be avulsed in the surgery and sent for histological examination. A follow-up appointment should be made for some months later to ensure that its removal has cured the symptom – if not, referral is indicated to try to determine the true cause.

DAY / Protection	1	2	3	4	etc	Score (each)
Tampon	II	I	II	I		1
		III	II			5
		I	I			10
Towel						1
		I	I			5
						20
Clots/ Flooding		S	S			Small = 1 Large = 5

A total score of >100 is compatible with menstrual blood loss >80mls, the upper limit of normal in the UK.

The example shows a score of 63, and could help reassure a woman that her loss is actually within normal limits.

Figure 1 – Pictorial Blood Loss Assessment Chart[2]

Few investigations are necessary or helpful. Where the periods are thought to be heavy measuring the haemoglobin is useful, as a significant menstrual loss (>80mls per month) will usually cause anaemia. If there are other indicators of thyroid dysfunction then TFTs should be performed. Where the symptoms are thought to be due to the climacteric measurement of gonadotrophins (FSH & LH) or oestrogen levels is rarely helpful – a trial of HRT would be better. Pelvic ultrasound should not be ordered unless a pelvic mass has been found on examination, in which case gynaecological referral is usually indicated. Gynaecological referral is also indicated for those women with IMB or PCB with no local benign lesion,

INTERMENSTRUAL	–		Cervical ectropion
			Cervical polyp
			Cervical carcinoma
			IUCD in situ
			Progestogen-only pill
			Endometrial polyp
			Endometrial carcinoma
POST-COITAL	–		As intermenstrual
			Uterine retroversion
HEAVY PERIODS	–	General	– Thyroid dysfunction
			Coagulation disorder
		Local	– Fibroids
			IUCD in situ
			Pelvic inflammatory disease
			Endometriosis
			Endometrial polyps
			Endometrial hyperplasia/ carcinoma

Table 1 – Causes of Abnormal Vaginal Bleeding – Reproductive years

and for those with prolonged or frequent (chaotic) bleeding particularly if over 40 years old.

The treatment of 'heavy periods' can be divided into medical and surgical, and account should also be taken of the woman's age. As many women, however, do not actually have heavy periods, it may be worthwhile simply using the pictorial chart to reassure the woman that her loss is not actually abnormal. Obviously treatment will be needed if the loss is interfering with her lifestyle.

Medical treatments will usually need to be continued for at least three months to see any improvement in the symptoms, and remember that most have only been shown to work in women with proven (rather than perceived) heavy loss. A suitable approach to medical treatment is given in Table 2. D & C is not usually indicated in women under 40 unless they have failed to respond to medical therapy, or have persistent intermenstrual bleeding[3]. Surgical treatment can be by hysterectomy (which guarantees amenorrhoea) or endometrial destruction by resection, diathermy ablation or laser ablation. Resection appears the most efficient, with a 30% chance of amenorrhoea and a 60% chance of satisfactory reduction in menstrual loss[4]. Although less successful than hysterectomy in achieving amenorrhoea, endometrial ablation has the advantages of lower morbidity and shorter hospital stay.

Acute episodes of heavy bleeding often occur around puberty or the climacteric and can be controlled with a course of progestogens. The patient must be warned that she will have a withdrawal bleed when she stops the treatment, and that it may again be heavy.

POSTMENOPAUSAL

There is no absolute definition of the time lapse required to diagnose postmenopausal bleeding (PMB) but one year of amenorrhoea is usually accepted. The history should include an assessment of the degree and duration of the loss, and whether it is the first such episode. Eighty percent of women who have a single bleed have no further loss, but between 30 and 40% of those with recurrent losses are found to have an endometrial carcinoma. Abnormal bleeding or discharge in women taking HRT also require investigation.

WOMEN AGED <40 YEARS	WOMEN AGED >40 YEARS
Regular cycle	Regular cycle
1. Weight loss[1]	1. Weight loss[1]
2. COCP (not if a smoker >35)	2. NSAID
3. NSAID	3. Cyclical progestogen[2]
4. Anti-fibrinolytics[3]	4. COCP (if slim, non-smoker)
	5. Antifibrinolytics[3]
Irregular cycle	Irregular cycle
1. Weight loss[1]	1. Weight loss[1]
2. COCP	2. Cyclical progestogen[2]
3. Cyclical progestogen[2]	3. COCP (if slim, non-smoker)

If the periods have not lightened after three months of therapy the options are to try an alternative treatment or refer the woman for a gynaecological opinion.

Glossary

COCP	combined oral contraceptive pill
NSAID	e.g. Mefenamic acid 500mg tds, ideally commencing before onset of menstruation
1.	where appropriate
2.	e.g. Medroxyprogesterone acetate 5mg bd
3.	e.g. Tranexamic acid 500mg tds during menstruation

Table 2 – Medical Treatment for 'Heavy Periods'

The causes of PMB are shown in Table 3. Examination of the woman should therefore aim to identify any cause within the genital tract. Do not be falsely reassured by a normal smear some two or three years previously – it may have been incorrect or an interval cancer may have developed. The opportunity can also be taken to perform a cervical smear, but remember that premalignant lesions rarely cause bleeding.

Vulval carcinoma	
Atrophic vaginitis	
Atrophic cervicitis	
Cervical	– polyp
	– carcinoma
Endometrial	– atrophy
	– polyp
	– carcinoma
Myometrial sarcoma	
Fallopian tube carcinoma	
Functional ovarian tumours	

Table 3 – Cause of Postmenopausal Bleeding

Even where a cause is apparent it has become customary to refer every woman with PMB to a gynaecologist for exclusion of endometrial carcinoma. Whether this is justified for a woman with a single episode of PMB is not clear, as there is no epidemiological data regarding the incidence of such cases and their outcome. Women with recurrent bleeds must have endometrial pathology excluded, and this can be achieved by Vabra curettage, Pipelle sampling, hysteroscopy and curettage or D & C.

Treatment of PMB is the removal of the primary lesion (if any). If the only abnormality found is atrophic change, treatment with local or systemic HRT is appropriate, although not necessary for a single episode. If heavy bleeding occurs on HRT then reducing the dose of oestrogen or increasing the dose of progestogen will often help. If the withdrawal bleed occurs early in the cycle this can be remedied by increasing the dose of progestogen. Intermenstrual spotting may be due to an inadequate dose of oestrogen. If manipulation of the hormonal dose does not resolve the symptoms then referral to a gynaecologist is advisable to exclude pathology.

SUMMARY

Most women who complain of abnormal vaginal bleeding in their reproductive years can be investigated and treated in general practice. However those who have abnormal bleeding before puberty or after the menopause have a high risk of serious underlying pathology and require gynaecological referral and assessment.

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