Clinical approach to a patient with abnormal uterine bleeding

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Abstract

Abnormal excessive uterine bleeding forms a large proportion of gynaecological complaints. Of postpubertal girls who experience excessive menstrual loss, about one quarter will never regain a normal cycle and flow. As she grows older many other factors may arise causing menstrual abnormalities.

Introduction

Excessive menstrual bleeding (menorrhagia) and acyclical bleeding (metrorrhagia), or combinations thereof, are the most commonly encountered forms of excessive menstruation. To exactly quantify menstrual blood loss is a difficult undertaking and is not commonly used in clinical practice to verify the complaint of excessive blood loss. For this reason the patient's history is of extreme importance and details of the bleeding, type, appearance, duration, cyclicity and associated symptoms such as pain must be noted.

The current, popular term for excessive menstruation is Heavy Menstrual Bleeding (HMB) as it is used in the UK NICE Guidelines. This term still has to gain international acceptance.

Phases of menstrual life

To understand the pathophysiology and clinical approach to excessive menstruation, menstrual life can be divided into three phases:
1. Adolescence (puberty until about 20 years)
2. Reproductive years (20 - 45 years)
3. Perimenopause (45 years to established menopause)

Organic and dysfunctional bleeding

When excessive menstruation is caused by disorders of the genital tract or other detectable abnormalities in the body, the cause is described as organic. Contrary to this, when all findings are normal, the cause is described as dysfunctional.

The common organic causes are listed in Table I.

Whether dysfunctional bleeding is related to ovulation (15% of cases) or anovulation (85% of cases) is of limited practical importance. The only patients in whom this should be determined, are those with concurrent infertility.

Clinical approach

In all cases where the main complaint is that of excessive menstrual bleeding, an immediate differentiation must be made between acute severe blood loss and chronic excessive menstruation.

Women with acute severe blood loss must be resuscitated. A diagnosis should be made on the basis of history, clinical examination and special testing including a pregnancy test, a hemocrit, abdominal and pelvic ultrasound and, if needed, a biopsy of a present lesion.

Women with chronic excessive menstruation will mostly be seen during a regular consultation. The history is of critical importance as decisions will of-
The most common organic disorder is disorders of menstruation. Management options for common organic disorders include GnRH (gonadotrophin-releasing hormone) agonist management to shrink the myoma, a myomectomy through laparotomy or laparoscopy, or embolisation of the uterine arteries supplying the myoma. In the young patient wishing to retain fertility, GnRH agonist pre-treatment followed by myomectomy is often preferred. For patients with completed families, myomectomy can still be considered and hysterectomy now also becomes a treatment option.

Approach to the patient in the different phases of menstrual life

Adolescence

The basic problem in this age group is immaturity of the hypothalamic-pituitary-ovarian axis resulting in prolonged production of oestrogens, but irregular ovulation. Resulting anovulatory oestrogen withdrawal bleeding can occur and can be quite severe. In a minority of patients (less than 20%) there may be an underlying haematological disorder. The approach is to the history as described, followed by a clinical examination and special tests. It should be noted that a vaginal examination or transvaginal ultrasound examination should not be performed in a virgo intacta patient. Special tests will include a pregnancy test, full blood count and platelets, clotting profile, and, if abnormal, tests for bleeding disorders such as von Willebrand’s disease. In all cases management will initially be medical with oral contraceptives and tranexamic acid high on the list. The patient should use oral contraception for periods of six months after which treatment can be interrupted to determine whether the cycle has improved. Medical or haematological abnormalities which may occur should be addressed specifically.

Reproductive years

Both organic and dysfunctional excessive bleeding occur during this phase. The assessment for organic lesions should be careful and thorough. Once dysfunctional excessive menstruation is diagnosed, the standard medical management rules will apply. In this menstrual life phase surgical treatment is also a consideration.

Perimenopause

During this phase the majority of patients will experience anovulatory excessive bleeding due to ovarian oocyte depletion. However, since the more serious forms of organic pathology occur more commonly in this age group than in younger patients, great care should be taken to exclude such disorders. This will include performing endometrial sampling and endo- and ectocervical cytology. Once organic disorders have been excluded, the medical management guidelines can be employed as set out in the NICE guidelines.

References:

See CPD Questionnaire, page 42