

# Medicine for Managers

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## Heavy Menstrual Bleeding

**For many women of reproductive age, monthly cyclical activity is a traumatic and miserable event which causes recurrent physical distress and emotional turmoil. It can produce real disruption to daily activity and damage to the quality of life. It is known as menorrhagia, but the preferred descriptive term is now often 'heavy menstrual bleeding'.**

In the United Kingdom, cyclical activity starts for an average female at around age 13 (menarche) and ceases on average at around 51. The pattern of starting and finishing periods has changed over time.

A woman born in the late 1930s had menarche at about 13½ and the menopause at 50 years and 3 months. Women born in the early 1960s underwent menarche at 13¼ and the menopause at 52 years and 8 months.

Women therefore have nearly three years longer of cyclical activity than they did forty years ago. Much of the change is attributed to better health and nutrition.

Women who do not become pregnant and those who reach menarche at age 11 or younger may experience an earlier or premature menopause

In a woman of child-bearing age, the monthly cyclical bleed involves the shedding of the superficial layers of the uterine lining to prepare the uterus for the possibility of pregnancy during the following month. The bleeding phase lasts, on average, for five to seven days and the overall cycle length from the first day of the period to the first day of the next period is 28 days, but may vary from 21 to 35 days and may be irregular. Normally, this is documented in medical records as K=7/28 (where K is the menstrual cycle).

Under normal circumstances, the bleeding is heaviest for the first two or three days of the cycle after which it tails off. However, the bleeding pattern may be different and variable and in some circumstances needs investigation or treatment.

Descriptive terms of menstrual variation and irregularity include:
***Menorrhagia*** (***Heavy menstrual bleeding***) is a monthly loss which commonly interferes with the physical, emotional or social quality of life
***Metrorrhagia*** is blood loss which is irregular in time and quantity
***Polymenorrhoea*** is frequent periods occurring less more frequently than every 21 days
***Dysmenorrhoea*** is painful periods
***Dysfunctional Uterine Bleeding*** is abnormal bleeding without any anatomical or physical cause

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Defining a heavy period can be difficult and subjective.

Most women lose about 40 ml of blood/uterine lining every month, which is equivalent to about three tablespoons (1 tbsp = 15 millilitres), but loss of 25-80 ml over a period of 5-7 days may be regarded as normal, as the definition of 'heavy menstrual bleeding' may vary from person to person, because of the difficulty in comparing loss between different individuals.

Indeed, research has shown that only about 10-15% of women who report 'heavy periods' actually have a blood loss which is double that of the average.

About one in twenty women consult their GP about the problem every year and, of that group, data shows that the examination and investigations fail to show any pathology in about half of them.

***Causes of heavy menstrual bleeding***
There are a wide renage of causes of bleeding disturbances, some of which are rare.

- ***Hormone Inbalances*** including thyroid overactivity and polycystic ovarian syndrome
- ***Non-cancerous uterine growths*** including fibroids and polyps
- ***Infections*** (including sexually transmitted infections) such as trichomoniasis, gonorrhoea and chlamydia.
- ***Cancerous growths*** may sometimes present in this way, involving the neck of the uterus (cervical) or the body of the uterus.
- ***Medication*** can cause excessive bleeding including:
    - Blood thinners
    - HRT
    - Birth control implants
    - Oral Contraceptives and injectable drugs such as *Depo-Provera*.
- ***Other factors*** may include:
    - When approaching the menopause
    - Hormonal imbalances (which may present as hirsutism (hairiness) or acne
    - Obesity with a BMI above 30

The bleeding may be so heavy that the patient may become anaemic.

***History and Examination***
This forms a key component of the assessment of any possible pathological cause of excessive bleeding. The history will include:

- General, including past and current illnesses
- The time of the first period
- The duration of the period
- Days when it is heavy
- Family History of heavy periods
- Pregnancies and birth control method
- Current medication
- How activities and quality of life are affected

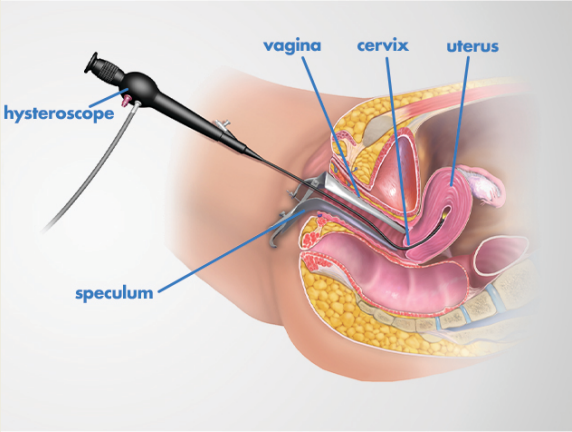
The examination will comprise a full gynaecological assessment including a smear as necessary.

***Investigations*** may be undertaken in general practice or by a specialist to whom the person is referred. Such tests will include:

- Blood tests including for anaemia, thyroid disorders, hormonal abnormalities or bleeding disorders
- Pelvic ultrasound, including a trans-vaginal ultrasound (where the probe is

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inserted vaginally) – subject to valid consent – to assess the organ sizes and structure.
- A cervical smear if not otherwise done
- Hysteroscopy to check for fibroids or




other uterine abnormalities

- Endometrial biopsy which is a biopsy of the uterine lining
- MRI scan to identify any other abnormalities

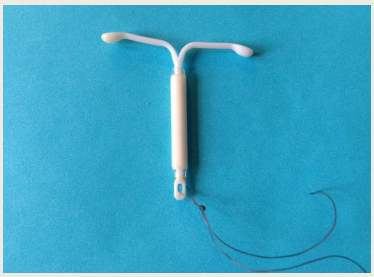
About half of patients investigated for heavy menstrual bleeding are found to have no specific pathology. Such bleeding patterns may be described as ***dysfunctional uterine bleeding***.

The other patients may have abnormalities such as fibroids, endometrial disorders, such as ectopic uterine tissue (endometriosis), polyps or more sinister cancerous change. Ovarian and hormonal disorders may cause heavy bleeding as may some systemic diseases.

Heavy menstrual bleeding may be treated medically or surgically.

***Medical treatment*** may include:

- ***Iron supplements*** to treat anaemia
- ***Ibuprofen*** or similar to ease cramp-like pains
- ***Birth control treatments*** (including tablets and patches) to regularise and lighten periods
  A ***hormonal coil*** is a small T-shaped plastic IUCD placed in the uterus. It is an



  effective (99%) coil with a 3-8 year duration. For most people it is convenient, with minimal side effects, and it makes periods lighter and shorter.
- ***Other hormone replacement therapy***

***Surgical Treatments***, normally recommended if medical management has not been successful, may include:

- ***Hysteroscopy*** to remove polyps or other causes of bleeding
- ***Dilatation and Curettage*** (D&C) to remove the lining of the uterus. The curettings may be sent to the laboratory for analysis.
- ***Myomectomy*** to remove fibroids
- ***Endometrial ablation*** is a popular technique. It involves destroying the uterine lining by electrocautery, microwave therapy or compression using a balloon.
- ***Hysterectomy*** remains a common option for women who do not wish to have bleeding nor want to keep the uterus. In the United Kingdom, one in five women will have a hysterectomy (around 55,000 operations a year) which is about 30-35% of the rate in the USA.

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***The Outlook***

For many women untreated heavy menstrual bleeding may grossly intrude on life, cause anaemia and leave the individual feeling tired and weak.
Other health problems may arise and various pathologies may not be recognised in a timely manner.

With appropriate examination and diagnosis, treatment and medical support, the problem can usually be managed without compromise of well-being.

***Finally***

Gynaecological terminology is peppered with classical words. The word ***uterus*** is a Latin word meaning 'belly' or 'womb' and its use was first recorded by physician Dr Helkiah Crooke in 1615.

The Latin word uterus itself may have been derived from a similar Sanscrit word.

Removal of the womb is ***hysterectomy*** (strangely not uterectomy) and the word is derived from the Greek *hysteros* meaning 'womb' and *-ectomy* meaning removal.

Menstruation comes from the Latin word ***mensis*** meaning a month, which in turn is a derivative of the Greek word ***mene***, meaning the moon. Whatever words are used to describe it all nowadays, we can be sure that the Greeks had a word for it!!

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