Menorrhagia

Definition
Menorrhagia is defined as increased menstrual blood loss - more than 80ml per cycle. In everyday life though, menstrual loss is, of course, rarely measured, and so a more useful definition would be menstrual loss that interferes with day-to-day living. A woman may complain of flooding, clotting or simply a heavy flow – each of these would count as menorrhagia.

The RCOG refer to:
“A history of heavy cyclical menstrual loss over several consecutive cycles without any intermenstrual or postcoital bleeding”

In the management of menorrhagia it is important to consider the whole picture – is the woman’s life being made miserable? Could her menorrhagia also be the cause of emotional and psychological difficulties? Her social life – at home and at work – may be suffering and it is important to acknowledge this. Equally, there may be occasions where emotional and psychological stress is focussed on and attributed to menstruation and where a similar amount of blood loss would be tolerated in happier times.

Epidemiology
• One in 20 women aged 30 to 50 consults her GP each year with menorrhagia.
• One in five women in the UK will have a hysterectomy before the age of 60 years.
• Half of hysterectomies are performed for menorrhagia.

Causes
The causes of menorrhagia are generally different depending on age group.

In teenagers, dysfunctional uterine bleeding is likely, although this is only a diagnosis of exclusion. Dysfunctional uterine bleeding, or DUB, is heavy and/or irregular bleeding in the absence of recognisable pelvic pathology. It is often associated with anovulatory cycles, so it is common at the extremes of reproductive life. It may, however, be ovulatory (for example, with an inadequate luteal phase) and in a patient with a normal pelvic examination and no organic pathology, DUB is the diagnosis, by exclusion.

In adult women, it is also important to consider the presence of an intrauterine contraceptive device (IUCD), fibroids, endometriosis and adenomyosis, pelvic infection, and polyps.

In perimenopausal women, endometrial carcinoma must be considered. General bleeding problems mustn’t be forgotten – for example von Willebrand’s and other blood dyscrasias. Don’t forget that thyroid disorders can also affect menstruation – in the case of menorrhagia, it is important to consider hypothyroidism.

Management
1) All women with menorrhagia require an abdominal and pelvic examination.

2) Blood tests. A full blood count is essential, of course, to see the effect the menorrhagia is having on the patient. If the patient seems hypothyroid clinically, thyroid function tests are indicated, but should not be performed routinely. Other hormonal tests are not recommended.

3) If pelvic pathology is suspected then imaging will be required – ultrasound is least invasive, but to have a proper look laparoscopy may be indicated, too.

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If the bleeding is irregular, or cancer is suspected, ultrasound and endometrial sampling, or hysteroscopy and directed biopsy are indicated.

**Treatment**

For those with a bulky uterus, or with irregular bleeding, it is essential to investigate the cause of the bleeding – not just treat symptomatically – and refer the patient for further assessment. (See below- Indications for referral).

The treatment of menorrhagia should be multi-faceted. Reassurance alone, may prove very useful, and may negate the need for further treatment. It is recommended where no treatment has been requested and the full blood count is normal.

For DUB, treatment depends on age – teenagers may find that symptoms gradually settle as the cycles become ovulatory.

Of course, if the menstrual loss is regarded as unacceptable by the patient, and interferes with life or causes anaemia, then treatment needs to be offered. Although the ideal might be to treat the underlying cause, this may not always be possible. For example a woman with fibroids may not want risky surgery for various reasons. Symptomatic treatment is therefore often required. There are several medical options and combinations:

**Iron supplements**
If menorrhagia is severe enough to cause anaemia, iron supplements will usually be required.

**Antifibrinolytics**, e.g. Tranexamic Acid
These reduce bleeding (by 49%) and need to be taken during bleeding. They are very effective, but as one would expect, they are contraindicated in thromboembolic disease. They are effective in women using an IUCD.

**Antiprostaglandins**, e.g. Mefenamic Acid
These reduce bleeding (by 29%) and also relieve dysmenorrhea. They need only be taken during days of bleeding. Diarrhoea affects a significant number of women, in addition to the potential side effects associated with NSAIDs.

**Hormones**
- The combined pill
  This is effective, but its use is limited by the usual contraindications. It is particularly important to remember not to prescribe this drug to smokers over the age of 35 years.
- Danazol
  This, too, is effective (and works by inhibiting ovulation), but should only be given by specialists. This is because of its heavy cost – both financially and in terms of unpleasant side effects.
- Progesterone-containing IUCDs, e.g. Mirena coil
  This is a very useful option. It has been shown to reduce bleeding by up to 86% at 3 months, and 97% at 1 year. The Mirena is effective in the treatment of DUB and has also been shown to reduce fibroid size after 6-18 months of use. It is a reversible measure (in that fertility is maintained once the coil has been removed) and the coil can be inserted in outpatient or GP clinics very easily in parous women.
Surgical Options
For women who have no plans for future pregnancies, surgery may be an option. Remember, though, that surgery is never desirable, and that every operation carries its own risks. Wherever possible medical treatments are tried first before considering surgery. Of course specific conditions are dealt with using different procedures (for example fibroids would warrant a myomectomy). Below is a general overview of the surgical options for menorrhagia:

Endometrial resection
This removes the lining of the womb, the endometrium. There are several methods: laser, rollerball electrode, electrocautery, or heating. Endometrial ablation will be more successful if the endometrium is thin, and so the patient may be given hormonal treatments prior to surgery to achieve this.

Hysterectomy
If the treatments above prove unhelpful, then the question arises whether hysterectomy should be performed. Remember that this is a major operation with a significant associated morbidity and mortality. Ultimately, though, the decision lies with the patient and her doctor. Of course a hysterectomy will result in amenorrhoea, and so menorrhagia will no longer be an issue. But remember that this would also result in an early menopause with its associated symptoms and physical consequences.

Indications for referral
A) Uterus > 10 weeks in size or pelvic mass or tenderness
B) Risk factors for endometrial cancer- eg obesity, polycystic ovary syndrome, tamoxifen treatment, unopposed oestrogen treatment
C) Red-flag symptoms- irregular bleeding, intermenstrual bleeding, post coital bleeding, sudden change in blood loss, pelvic pain, dyspareunia

Further information
Clinical guidelines on RCOG website:
www.rcog.org.uk

Lara Batchat, September 2005