Clinical Practice Guideline for Treatment Options for Menorrhagia

Menorrhagia is defined as heavy blood loss during menstruation for several consecutive cycles. This condition can be related to a number of underlying conditions (e.g. fibroids, polyps, hormonal imbalance, anovulation, adenomyosis, endometrial hyperplasia) or idiopathic in nature (often referred to as dysfunctional uterine bleeding). Women with certain bleeding conditions or who take certain medications can also have heavy menstrual bleeding. (e.g. von Willebrand disease, having a low platelet count, taking a blood thinner such as Warfarin.) The objective definition of Menorrhagia is monthly blood loss that exceeds 80 ml or lasts greater than 7 days. In a normal menstrual cycle, a woman loses an average of 2 to 3 tablespoons (35 to 40 milliliters) of blood over four to eight days.

Symptoms of Heavy or Prolonged Menstrual Bleeding
Women with heavy or prolonged menstrual bleeding typically have one or more of the following:

- Soak through a pad or tampon every one or three hours on the heaviest days of the period
- Have bleeding for more than seven days
- Need to use both pads and tampons at the same time due to heavy bleeding
- Need to change pads or tampons during the night
- Pass blood clots larger than 1 inch (about 2.5cm)
- Iron deficiency anemia

Diagnosis of Heavy or Prolonged Menstrual Bleeding
Testing can include:

- Blood tests to look for anemia, iron levels, thyroid disease, or a bleeding disorder.
- A pelvic ultrasound (usually through the vagina), which can detect endometrial polyps and fibroids
- Endometrial biopsy
- Hysteroscopy

Several minimally invasive techniques are available to treat this condition:

1). First line treatment for dysfunctional uterine bleeding usually consists of drug therapy with iron supplements, antifibrinolytics and NSAIDS.

- Excessive loss may also be treated with hormone therapy, including oral contraceptives, cyclic progesterone or the progesterone releasing IUD.
  - Oral contraceptives reduce bleeding and can also reduce cramps and pain during a period. It might take three months for bleeding to improve after starting hormonal birth control. A strategy called continuous dosing may be recommended by some
providers for patients to take their birth control continuously, without a break week, so they will not have a monthly menstrual cycle.

- Progestin pills-high dose (e.g. norethindrone or medroxyprogesterone acetate) are sometimes recommended for women who do not ovulate regularly. They may be prescribed for 5-14 days each month or continuously every day. This treatment helps to make the lining of the uterus thinner, reducing or even eliminating bleeding.

- IUDs (e.g. Mirena or Liletta) slowly release Progestin into the uterus which reduces menstrual bleeding for up to five years. This treatment is best for women who do not want to become pregnant in the next six months. The most common side effect is irregular bleeding; this is usually light bleeding or spotting. This usually improves after the first several months after IUD placement. In women who use a hormonal IUD specifically to treat heavy bleeding, expulsion rates (when the uterus pushes the IUD into an improper position or completely out of the uterus) are high.

- Antifibrinolytics (e.g. Lysteda (tranexamic acid)) is a non-hormonal medication that may be used in women ages 18 years and older when hormonal therapy is contraindicated. This medication works by helping the blood clotting system and slowing menstrual bleeding quickly within two to three hours. This medication is only taken a few days each month: 1.3 grams orally three times per day for up to 5 days during monthly menstruation. Side effects can include headache, muscle cramps/back pain and abdominal pain. **Antifibrinolytics should not be taken with hormonal birth control unless the health care provider approves; there is controversy regarding a possible increased risk of blood clots, stroke, and heart attack when taken together.**

- NSAIDs (e.g. Ibuprofen, Naproxen, Ponstel (mefenamic acid*)) can help reduce menstrual bleeding and cramps. Bleeding associated with fibroids is usually treated with NSAIDs or hormones alone or in conjunction with surgery.
  - Mefenamic acid does not demonstrate increased efficacy over naproxen and it’s likely not covered by many insurances as it’s high cost with minimal clinical value.
  - Dosing recommendations for other recommended NSAIDs: start the medication on the first day of bleeding and continue for four or five days or until menstruation ceases: ibuprofen 600 mg daily and naproxen 500 mg with repeat dose in 3-5 hours, then 250-500 mg twice daily

- Drug therapy is limited in insufficient response rates, adverse-effects, limited compliance and long-term use requirement.

2). Dilation and curettage, with or without resection of endometrium as a same day procedure.

3). **Endometrial ablation - destruction of the lining of the uterus by any of several mechanisms: electrocautery, hot water, microwave or freezing.** Cryoablation (freezing) is a treatment designed to reduce or completely eliminate heavy menstrual blood loss and can be performed in the office. A cryoprobe, inserted through the vagina under ultrasound guidance in the uterus, delivers extreme cold (<-15 to -20C) to the endometrium in freeze-thaw cycles. Patients must meet **all** of the following criteria:

1. Menorrhagia that is unresponsive to (or with contraindication to) either:
   - Hormonal therapy or other pharmacotherapy; or
   - Dilation and curettage; **and**
2. Cancer, pre-cancer or structural abnormalities (polyps, fibroids) that require surgery (endometrial sampling) have been excluded; and

3. Pap smear and gynecological examination have excluded significant cervical disease; and

4. Patient has completed childbearing; and

5. The degree of severity should be that the patient would otherwise be an appropriate candidate for a hysterectomy; and

6. No active genital or urinary tract infection.

If patients cannot tolerate or fail the three techniques outlined above, the definitive therapy for treatment of menorrhagia is hysterectomy.

References:


UpToDate: “Patient Education: Heavy or Prolonged Menstrual Bleeding (Menorrhagia); Beyond the Basics” 28 Nov 2018