

## **Patient's Guide to Menorrhagia**

**Menorrhagia** is the medical term for abnormal bleeding at the time of the menstrual period, which is excessive or prolonged or both. A normal menstrual cycle is 21 to 25 days in duration, with bleeding lasting an average of 5 days and total blood flow between 25 to 80 mls. A blood loss of greater than 80 mls or lasting longer than 7 days constitutes menorrhagia. Depending upon the cause, it may be associated with abnormally painful periods (dysmenorrhea).<sup>1</sup>

Menorrhagia may be due to

- Abnormal blood clotting
- Disruption of normal hormonal regulation of periods e.g. excess estrogen
- Disorders of the endometrial lining or the uterus e.g. excessive build up in endometrial lining
- Abnormalities in prostaglandin metabolism which decreases clotting activity of the blood.
- Hypothyroidism
- Vitamin A deficiency
- Intrauterine Devices (IUD's)
- Uterine fibroids
- Endometriosis
- Complications of pregnancy
- Pelvic Inflammatory Disease

Excessive menstrual bleeding must be evaluated by a doctor in order to rule out potentially serious underlying conditions that can cause this problem.

### **Risk Factors**

Some possible risk factors include:

- Obesity
- An ovulation which is the lack of release of an oocyte (egg) from the ovaries during a cycle
- Estrogen administration without progesterone
- Prior treatment with progestagens or oral contraceptives e.g. where several packets are taken without a withdrawal gap in order to defer menstruation.

### **Nutritional Treatment Options**

1. **Green leafy vegetables** -These will provide vitamin K which encourages blood to clot
2. **Decrease consumption of Arachidonic acid** – Avoid animal fats, red meat and dairy produce. Arachidonic acid encourages the production of a 'BAD' type of prostaglandin (called PGE2) that leads to increased blood flow, and a reduced blood-clotting ability. This results in heavier periods. In fact, research has shown that women with menorrhagia have higher levels of arachidonic acid, causing more PGE2 to be made. Women with heavy periods should ideally consume less arachidonic acid, which is found mainly in animal-based foods.

3. **Vitamin A** – 25,000 IU twice daily

Vitamin A is an antioxidant that generally helps to protect your cells against damage. It helps cells reproduce normally and is also needed for red blood cell production. Vitamin A deficiency has been found in some women with heavy periods. Women with menorrhagia who took 25,000 IU of vitamin A twice per day for 15 days, 93% showed significant improvement and 58% had a complete normalization of menstrual blood loss.<sup>3</sup> However, women who are or could become pregnant should not supplement with more than 10,000 IU (3,000 mcg) per day of vitamin A.

4. **Iron** – 30 – 100 mg daily

The relationship between iron deficiency and menorrhagia is complicated. Not only can the condition lead to iron deficiency, but iron deficiency can lead to or aggravate menorrhagia by reducing the capacity of the uterus to stop the bleeding. Common symptoms of iron deficiency (anemia) include fatigue, loss of appetite, constipation, irritability and pallor, among other things. Lab tests can determine the level of iron available in red blood cells (hemoglobin) and ferritin stores in the liver and spleen. Tests on ferritin stores are important as it is possible to be iron deficient even if your hemoglobin levels are normal. If an iron deficiency is diagnosed, many doctors recommend 100–200 mg of iron per day, although recommendations vary widely. Supplementing with iron decreases excess menstrual blood loss in iron-deficient women who have no other underlying cause for their condition. However, iron supplements should be taken only by people who have, or are at risk of developing, iron deficiency. Vitamin C is essential for the body to absorb iron, so for maximum absorption take 1000mg (1 gram) of vitamin C along with iron supplement preferably on an empty stomach. Iron and vitamin C supplements should not be taken with other supplements.

Iron in the form of ferrous sulphate (also called iron sulphate) should be avoided since it is less easily absorbed by the body. Only 2 to 10 percent of the iron from this type of iron supplement is actually absorbed by the body, and half is eliminated, causing blackening of stools and constipation.

In a double blind study, menorrhagia improved in 75% of a group of chronically iron-deficient patients placed on iron supplementation as compared to only 33% of placebo treated controls, as statistically significant difference.<sup>4, 5</sup>

5. **Vitamin C**- 1gm /day and Bioflavonoids – 3 gm /day

Both vitamin C and flavonoids decrease capillary (small blood vessels) fragility and therefore protect against damage and the blood loss of menorrhagia. Taken as a supplement, vitamin C has also produced excellent results for many women with heavy periods. Bioflavonoids can also have an anti-estrogen effect on the uterus by occupying the estrogen receptor sites and thus limiting the estrogen stimulating effect on the endometrium. This also helps to reduce bleeding. Foods high in flavonoids and vitamin C include grape skins, cherries, black and blue berries and the pulp and white rind of citrus fruits.

In one small study, 88% of women with menorrhagia improved when given 200 mg vitamin C and 200 mg flavonoids three times per day. In another study, 70% of women with excessive menstrual bleeding experienced at least a 50% reduction in bleeding after taking a flavonoid product. The preparation used in this study contained 90% diosmin and 10% hesperidin and was given in the amount of 1,000 mg per day, beginning five days prior to the expected start of menstruation and continuing until the end of bleeding for three cycles.<sup>6, 7, 9, 10</sup>

6. **Vitamin E** – 400 iu/day

Vitamin E decreases capillary fragility and promotes PGE1 (good prostaglandin)

In a study of women with menorrhagia associated with the use of an intrauterine device (IUD) for birth control, supplementing with 100 IU of vitamin E every other day corrected the problem in all cases within ten weeks (63% responded within four weeks). The cause of IUD-induced menstrual blood loss is different from that of other types of menorrhagia; therefore, it's possible that vitamin E supplements might not help with menorrhagia not associated with IUD use.<sup>8</sup>

7. **Evening Primrose Oil** – 3 capsules three times daily

Evening Primrose oil (EPO) contains an omega 6 essential fatty acid, gamma linoleic acid (GLA) which is the active ingredient. It is believed that GLA is able to inhibit the release of uterine prostaglandins, high levels of which, contribute to menorrhagia. The goal is to increase levels of essential fatty acids, which creates the 'GOOD' type of prostaglandins (PGE1). Beneficial prostaglandins help to reduce abnormal blood clotting, and they are produced from certain unsaturated fats, called essential fatty acids (EFA).<sup>11</sup>

**References:**

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