

# Abnormal Uterine Bleeding in Non-Pregnant Premenopausal Women and Teens

### Tara Doyle Marczak, DO

Abnormal uterine bleeding (AUB) is bleeding from the uterus that is unpredictable, lasts longer, or is heavier than usual. This abnormal bleeding can last for several months to years. In some cases it can occur suddenly. AUB is a common complaint, so it is important to learn more about the causes. There are treatment options available for AUB. Note: this article does not address abnormal uterine bleeding in pregnancy or in women after menopause.



# Background

The uterus consists of two layers. It has a thin inner lining (endometrium) and a thick outer muscular wall (myometrium). Menstruation typically occurs 10 to 14 days after the ovary releases an egg. This is known as ovulation. In people who have regular periods, the inner lining of the uterus thickens each month to prepare for pregnancy. When a person does not get pregnant, the uterus sheds this thickened inner lining.

A menstrual period typically comes every 21 to 35 days. It generally lasts 5 days. Symptoms of AUB include:

- Bleeding in between periods
- Bleeding that lasts more than 7 days
- Extremely heavy bleeding
- Bleeding after intercourse

#### Causes

There are a many reasons a person may experience AUB. The most common causes are discussed below.



#### **Structural**

Polyps and fibroids can lead to abnormal uterine bleeding. Polyps are non-cancerous growths of the lining of the uterus. Fibroids are non-cancerous growths of the muscle of the uterus. (Fibroids will be reviewed in a separate FFHA article; please refer to that article for further information.) Endometriosis is a condition in which the lining of the uterus is found outside of the uterus. Similarly, adenomyosis occurs when the lining of the uterus is embedded in the uterine muscle. Both conditions can cause painful and sometimes irregular periods. Cancer of the uterus or cervix may also cause irregular bleeding.



#### Hormonal

Irregular periods can occur if a person does not ovulate every month. In teens, AUB most commonly occurs due to hormone dysfunction. Another disorder, polycystic ovary syndrome (PCOS), occurs when a person's hormones are not in balance. This leads to irregular bleeding because there is too much estrogen. Thyroid disease can also lead to irregular bleeding. Both high and low

thyroid levels can create bleeding, but it's more common with low thyroid levels.

#### **Medications**

Some medications can cause abnormal bleeding. Examples of these include:

- blood thinners (like Warfarin or Plavix)
- non-steroidal anti-inflammatory drugs (like Aspirin or Ibuprofen)
- herbal remedies (like gingko, ginseng, or motherwort)

It is important for a person to discuss with a healthcare provider before stopping any prescribed medications if abnormal bleeding does occur.



## **Diagnosis**

Your health care provider will need to get a complete history and physical exam, including a pelvic exam. They will ask about:

- your bleeding patterns, pain, and amount of bleeding
- your medications
- your surgical history
- your gynecologic and obstetric history
- any medical problems
- family history, especially history of bleeding disorders

You will also be given a pregnancy test to make sure you are not pregnant. Once this is ruled out, more tests may be offered, such as:

- blood count test
- thyroid level test
- sexually transmitted infection tests
- pap smear
- blood disorder testing for people with certain risk factors
- endometrial biopsy, or a sample of the uterine lining, for people with infertility or certain risk factors for cancer
- pelvic ultrasound to look for fibroids or polyps.

If further evaluation is needed, a saline infusion sonohysterography (injecting saline in the uterus and then performing an ultrasound) or hysteroscopy (using a camera to visualize the uterine cavity) can be done.

#### **Treatments**

There are several treatment options available. The options for you will depend on the cause of the abnormal bleeding and your age, your medical history and whether or not you want to get pregnant in the future.

If you have sudden heavy uterine bleeding, it is important for you to be assessed by a doctor. This is extra important if you have symptoms such as lightheadedness, dizziness, shortness of breath, or chest pain. Treatment options in these situations include IV hormonal therapy (estrogen) and birth control pills or progesterone pills in higher than usual doses. Non-hormonal medications (such as tranexamic acid) can be given to help with clotting. These treatments are meant to stop the current bleeding. They will also reduce blood loss during the following menstrual periods. In more urgent cases, surgery is an option.





If you have had bleeding for several months, treatment options are similar. If having an irregular period doesn't bother you, you may opt for no treatment. If you prefer treatment, hormonal medications are available in a variety of forms. You may be offered birth control pills or the patch, a progesterone intrauterine device (IUD), or a progesterone shot. These medications work by regulating your menses to make them lighter, shorter, and predictable.

There are also surgical options available. Hysteroscopy can be used for diagnosis. During this test, small fibroids or polyps can be removed from the uterus to reduce bleeding. Myomectomy is the removal of fibroids either via hysteroscopy, minimally invasive surgery (laparoscopy) or an open procedure with an abdominal incision. Another option is endometrial ablation. In this surgery your doctor will remove the lining of the uterus through a variety of techniques (such as heated fluid or microwave energy). A further option is uterine artery embolization. This surgery blocks the blood supply to the fibroids. Lastly, hysterectomy, removal of the entire uterus, is the final treatment option. Hysterectomy may be necessary or helpful in women who do not want to get pregnant in the future, for whom all other treatments have failed or if there is a concern for cancer.

#### **Take Home Points:**

- Abnormal uterine bleeding (AUB) is bleeding from the uterus that is unpredictable, lasts longer or is heavier than usual.
- A thorough history and physical exam are essential in determining the proper workup in finding a cause for your irregular bleeding
- Treatment options should be based on a person's history and future fertility plans
- Goal of treatment is to reduce blood loss and improve regularity in subsequent menstrual cycles

#### References

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## About the author:



Tara Doyle Marczak, D.O. is an OB/GYN resident at MedStar Washington Hospital Center/Georgetown University Hospital, Washington D.C.

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