

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

ABSENT OR IRREGULAR PERIODS

WHAT IS IT?

Amenorrhea is the medical term for the absence of a person's menstrual period and is classified as primary or secondary:

- Primary amenorrhea is defined as the absence of menses by age 15 years.
- Secondary amenorrhea is defined as the absence of menses for more than 3 months in patients with previously regular menses or 6 months in patients with previously irregular menses.

Oligomenorrhea is the medical term for having infrequent menses (defined as less than 6-8 menstrual periods per year).

Individuals who miss more than 3 menstrual periods a year (either consecutively or spread out over the course of a year) should see their healthcare provider to rule out an underlying medical disorder.

This fact sheet will focus primarily on the evaluation and treatment of secondary amenorrhea.

WHAT CAUSES IT?

Secondary amenorrhea is most commonly caused by:

- Pregnancy.
- Changes in birth control.
 - After stopping the pill, some individuals may not menstruate for several months. If menses have not resumed after 3-6 months, medical evaluation is needed to rule out other causes.
 - After stopping the Depo shot, normal menses may not resume for up to 18 months.
- Physical or psychological stress. High stress levels can disrupt the functioning of the hypothalamus, which is a part of the brain that controls the hormones that regulate the menstrual cycle. This type of amenorrhea is called "functional hypothalamic amenorrhea" and is characterized by a low estrogen state, which can increase the risk of bone loss and other complications.
 - Common examples of physical stress include weight loss below a certain level (about 10% below ideal body weight), excessive exercise, disordered eating, and nutritional deficiencies. The "female athlete triad" is defined as the presence of amenorrhea, disordered eating, and bone loss.
 - Emotional stress, chronic illnesses (eg. celiac disease, diabetes mellitus type 1), and serious infections may also lead to hypothalamic amenorrhea.
 - Sometimes no specific cause is identified.
- Polycystic Ovary Syndrome or PCOS (please refer to the Student Health PCOS fact sheet for more info). PCOS is the most common reproductive disorder in women. It accounts for 20% of cases of amenorrhea and 50% of cases of oligomenorrhea. It is a chronic condition characterized by ovarian dysfunction and high levels of androgens (male hormones).
- High prolactin levels. Prolactin is a hormone involved in breast milk production and is produced by the pituitary gland in the brain. Overproduction of the hormone by the pituitary can lead to infrequent menses.

Other causes of amenorrhea can include certain medications, thyroid problems, disorders of the ovaries and other endocrine glands, and structural problems in the reproductive tract.

Oligomenorrhea can be caused by many of the same conditions that lead to amenorrhea. However, the most common cause of oligomenorrhea is Polycystic Ovary Syndrome (PCOS).

HOW IS IT EVALUATED?

Your medical provider will ask detailed questions about your symptoms/medical history and perform a physical exam. A urine test is usually performed to rule out pregnancy. If the pregnancy test is negative, a limited set of blood tests are commonly done to check for hormonal abnormalities:

- If initial lab results are normal, possible causes can include functional hypothalamic amenorrhea or blockage of the reproductive tract (eg. uterine scarring from a previous gynecologic procedure, etc.).
- If lab results are abnormal, further work-up is determined by the suspected cause (eg. PCOS, high prolactin levels, thyroid disease, etc.). For example, an ultrasound of the uterus/ovaries or a referral to a specialist may be recommended. If prolactin levels are high, an MRI of the brain may be necessary to further evaluate the pituitary gland.

In some cases, assessment of the patient's estrogen status with a progesterin withdrawal test is used to guide further evaluation and treatment. Typically a 10-day course of the hormone progesterone is prescribed:

- If a woman has a period after completing the progesterone course, this confirms that her body is able to produce estrogen (eg. PCOS).
- If a woman still does not have a period, this suggests that estrogen levels are low (eg. exercise-induced amenorrhea) or that there is some blockage of the reproductive tract.

HOW IS IT TREATED?

Treatment will depend on the underlying disorder that is causing symptoms. Treatment goals also include addressing fertility issues and preventing complications, such as bone loss (osteoporosis).

■ Stress-induced Amenorrhea (Functional Hypothalamic Amenorrhea or FHA)

- **Lifestyle changes** directed at the specific cause of stress is the mainstay of treatment:
 - If amenorrhea is related to excessive exercise and/or low body weight, reversing the nutritional deficit is the best treatment. This includes increased caloric intake, moderation in exercise, and/or nutritional counseling.
 - Stress management can also be helpful. Studies suggest that cognitive behavioral therapy (CBT) can restore menstrual cycles in some women.
 - If amenorrhea is related to a chronic illness like celiac disease or diabetes, treatment is aimed at the underlying disorder.
 - Amenorrhea from a severe illness usually resolves on its own once the patient recovers.
- **Medications**
 - Hormonal therapy, such as birth control pills, may be recommended in young women with FHA and low bone density if menses do not resume with 6 to 12 months of lifestyle changes. Estrogen replacement will help with the return of menses but will not reverse bone loss if the patient does not also improve their caloric and nutritional intake.
 - Supplementation with calcium and vitamin D is recommended in patients who are estrogen deficient to prevent bone loss. The goal is 1200-1500mg of calcium daily.

■ Polycystic Ovary Syndrome (PCOS)

Treatment is aimed at managing symptoms (irregular menses, acne, abnormal hair growth, etc.) and preventing complications, like diabetes and endometrial hyperplasia. Birth control pills containing progesterone are often used to regular menses and to protect against unopposed estrogen activity in the uterus. For more information, please refer to our PCOS fact sheet.

■ High Prolactin Levels

Treatment with medications called dopamine agonists are used to regulate menses and help women become pregnant.

CAN I STILL GET PREGNANT?

Yes! Don't assume that you cannot get pregnant. Because you can't predict when your period will begin again, you also can't predict when egg production will occur. If you are sexually active and:

- Do not want to become pregnant, you will still need to use birth control to prevent pregnancy.
- Wish to become pregnant, hormonal treatments prescribed by a specialist may be needed to achieve pregnancy.