

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 diagnosed when an individual has not had their first menses by age 15.
 - Secondary amenorrhea is defined as the absence of menses for more than 3 months in those with previously regular menses or 6 months in individuals with previously irregular menses.
- ❖ **Oligomenorrhea** is the medical term for having infrequent menses (defined as less than 9 periods per year) or a cycle length greater than 35 days.

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 or removing a contraceptive implant or IUD, 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 (FHA) 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 of 10% or more below ideal body weight, having a low percentage of body fat, 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 FHA.
 - Sometimes no specific cause can be identified.
 - Polycystic Ovary Syndrome or PCOS (please refer to the Student Health PCOS fact sheet to learn more). PCOS is the most common reproductive disorder in females. It is a chronic condition characterized by ovarian dysfunction and high levels of androgens (male hormones). 20% of amenorrhea cases and 50% of oligomenorrhea cases are due to PCOS.
 - 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** is 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, perform a physical exam, order labs, and consider other testing:

- ❖ A urine test is usually performed to rule out pregnancy. If the pregnancy test is negative, a limited set of blood tests are commonly ordered to check for hormonal abnormalities.
- ❖ If initial blood tests are normal, possible causes can include FHA or blockage of the reproductive tract (eg. uterine scarring from a gynecologic procedure, etc).
- ❖ If lab results are abnormal, further work-up is determined by the suspected cause (eg. PCOS, thyroid disease, high prolactin levels, 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.
- ❖ A progestin withdrawal test is used in some cases to assess a patient's estrogen status. Typically a 10-day course of the hormone progesterone is prescribed:
 - If the patient has a period after completing the progesterone course, this confirms that the body is able to produce estrogen (eg. PCOS).
 - If the patient 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 causing the problem. Treatment should also address fertility issues and potential complications, such as bone loss (osteoporosis).

- ❖ **Stress-Induced Amenorrhea (Functional Hypothalamic Amenorrhea or FHA)**
 - **Lifestyle changes** directed at the specific cause of stress are 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 individuals.
 - If amenorrhea is related to a chronic illness like celiac disease or diabetes, treatment is directed 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 individuals with FHA and low bone density if menses do not resume with 6 to 12 months of lifestyle changes. Estrogen replacement will help to regulate the menstrual cycle but will not reverse bone loss if the person does not also improve their caloric and nutritional intake.
 - Supplementation with calcium and vitamin D is recommended in those who are estrogen deficient to prevent bone loss. The daily calcium intake goal is 1200-1500mg.
- ❖ **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 regulate menses and protect against unopposed estrogen activity in the uterus.
- ❖ **High Prolactin Levels**

Patients are typically referred to an endocrinologist for treatment. Medications called dopamine agonists are commonly used to regulate menses and improve fertility.

CAN I STILL GET PREGNANT?

Yes! Don't assume that you cannot get pregnant. Because you can't predict when your period will resume, it will be difficult to predict ovulation. 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.

RECOMMENDED WEBSITES: www.mayoclinic.org, www.acog.org