

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

DYSMENORRHEA**WHAT IS IT?**

Dysmenorrhea (*Greek for painful menstruation*) is one of the most common gynecological problems, affecting 50-90% of females worldwide. It can be divided into primary and secondary types. Primary dysmenorrhea is the occurrence of recurrent lower abdominal cramping during menstruation that is not caused by a demonstrable disease. Secondary dysmenorrhea refers to painful menstrual cramps that result from an identifiable disease process in the uterus or other female reproductive organ.

WHAT ARE THE CAUSES?

- ❖ **Primary dysmenorrhea** is the most common type of menstrual pain.
 - It is caused by the excessive production of prostaglandins, which are chemicals produced in the lining of the uterus during menstruation:
 - Prostaglandins cause the smooth muscles of the uterus to contract, which helps to shed the uterine lining during menstruation. Strong contractions can result in a temporary loss of blood supply to the muscle, causing pain.
 - Prostaglandins may also contribute to the nausea and diarrhea experienced by some individuals during menstruation.
 - Most people with primary dysmenorrhea do not have risk factors for this condition. However, a slight increased risk has been associated with smoking, being of a younger age, stress, and having a family history of dysmenorrhea.
- ❖ **Secondary dysmenorrhea** is menstrual pain caused by an abnormality or a disease process of the uterus, ovaries, or fallopian tubes. Examples include:
 - Endometriosis (when tissue from the uterine lining implants outside of the uterus).
 - Uterine fibroids.
 - Pelvic inflammatory disease.
 - Scar tissue.
 - Ovarian cysts.
 - Adenomyosis (when uterine tissue grows into the wall of the uterus).
 - Cervical stenosis (narrowing of the cervical opening).

WHAT ARE THE SYMPTOMS?

- ❖ **Primary dysmenorrhea** is most common in the teens and early 20s but can persist throughout the reproductive years. Typically, symptoms decrease with age and improve following childbirth.
 - Pain typically begins just before or with the start of the menstrual cycle.
 - It is usually described as a cramping in the lower abdomen but may also be felt in the back or the thighs.
 - The pain is usually intermittent, gradually decreasing over 1-3 days, but some may feel a continuous dull ache. Severity varies from mild to disabling.
 - Other symptoms may include nausea, vomiting, diarrhea, fatigue, headache, and a general sense of malaise.
- ❖ **Secondary dysmenorrhea** tends to present later in life, with symptoms worsening over time.
 - The pain of secondary dysmenorrhea typically lasts longer than the menstrual period. Often, the patient does not have a history of painful periods.
 - Menstrual cramping may be accompanied by spotting, pain with intercourse, abnormal vaginal discharge, fever, chills, or frequent urination.
 - Symptoms do not improve significantly with treatment options usually effective for primary dysmenorrhea.

HOW IS IT DIAGNOSED?

The diagnosis of dysmenorrhea is based on the individual's symptoms and physical exam, which usually includes the abdomen and pelvis. A pelvic ultrasound may be ordered in some cases to further evaluate the uterus and ovaries.

WHAT IS THE TREATMENT?

- ❖ **Primary dysmenorrhea** responds well to several therapies, which can be used individually or in various combinations:

Medications

- Anti-inflammatory pain medications, such as ibuprofen (Advil or Motrin) and naproxen (Aleve), are very effective in reducing menstrual pain and cramping. They work by preventing the release of prostaglandins from the uterus.
 - Take the medication regularly, beginning 1-3 days prior to the onset of menses (usually when you first notice symptoms) and continue regular dosing for 2-3 days. Common dosing recommendations include ibuprofen 400-600mg every 6 hours or naproxen 220-500mg twice daily.
 - These medications should be taken with food to avoid an upset stomach.
 - Consult your medical provider before starting these medications if you have a history of stomach or kidney problems.
- Birth control medications (such as birth control pills, the NuvaRing, the Depo shot, Nexplanon, and hormone-containing intrauterine devices) are also effective.
 - The progesterone component of these medications thins the lining of the uterus where prostaglandins are formed, leading to decreased pain and bleeding. Symptoms usually improve significantly after 2-3 months of use.
 - Some hormonal contraceptives may also be taken continuously to skip menstrual cycles and avoid cramping altogether. Light spotting may occur with this method, especially during the first few months of use. Talk to your medical provider for more information.

Self-Care

- Heat applied to the lower abdomen can work as well as ibuprofen or naproxen.
 - Try a heating pad, hot water bottle, or soaking in a hot bath as often as needed.
 - Pain relief may be faster when heat is used in combination with pain medication.
- Exercise has been shown to decrease menstrual symptoms in some studies. One study suggests that exercise may lead to increases in progesterone (which thins the uterine lining) and reductions in pain mediators. Since there are many health benefits from exercise, try increasing your physical activity to relieve symptoms.
- Dietary changes have been shown in a few small studies to reduce pain. More research is needed regarding safety and efficacy before their use is recommended. Interventions associated with some improvement in symptoms include low-fat vegetarian diets, increased dairy intake, Vitamin E, B1 (thiamine), B6, Vitamin D3, fish oil supplements, and ginger powder.

Other

- Alternative medicine practices, like acupuncture or yoga, have been found to relieve menstrual cramping in some studies.
- A referral to a specialist may be needed in cases where symptoms are severe and unresponsive to traditional treatment options.

- ❖ **Secondary dysmenorrhea** requires a thorough medical evaluation by a specialist and specific treatment of the underlying cause.

RECOMMENDED WEBSITES: familydoctor.org, www.mayoclinic.org, www.uptodate.com