

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**DYSMENORRHEA****WHAT IS IT?**

Dysmenorrhea (*Greek for painful menstruation*) is one of the most common women's problems, affecting 50-90% of women worldwide. It can be divided into primary and secondary types. In primary dysmenorrhea, the most common cause of recurrent menstrual cramping, no abnormality of the uterus is found. Less commonly, painful menstrual cramps may result from secondary dysmenorrhea, which refers to a group of disorders in which a disease process in the uterus or other female reproductive organ has been identified.

**WHAT ARE THE CAUSES?**

**Primary dysmenorrhea**, the most common type of menstrual pain, 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 women during menstruation.

Primary dysmenorrhea is most common in women in their teens and twenties but can persist throughout the reproductive years. Typically, symptoms decrease with age and can resolve following pregnancy.

Most women with primary dysmenorrhea do not have risk factors for this condition. However, slight increased risk has been associated with:

- Smoking.
- Menstruation that starts before age 11.
- Long, heavy, or irregular periods.
- No prior childbirth.
- 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. Causes can include endometriosis (when tissue from the uterine lining implants outside of the uterus), pelvic inflammatory disease, uterine fibroids, scar tissue, adenomyosis (when uterine tissue grows into the wall of the uterus), ovarian cysts, and cervical stenosis (narrowing of the cervical opening).

**WHAT ARE THE SYMPTOMS?****Primary dysmenorrhea**

- 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 intermittent, gradually decreasing over one to three days. Severity varies from mild to disabling.
- Other symptoms may include nausea, vomiting, diarrhea, constipation, fatigue, headache, sweating, and dizziness.

**Secondary dysmenorrhea**

- The pain of secondary dysmenorrhea typically lasts longer than the menstrual period. Often, the patient does not have a history of painful periods.
- Cramping may be accompanied by spotting, pain with intercourse, abnormal vaginal discharge, fevers, chills, or frequent urination.

## **HOW IS IT DIAGNOSED?**

The diagnosis of dysmenorrhea is based on the individual's symptoms and physical exam, which often includes abdominal and pelvic examinations. A pelvic ultrasound may be ordered in some cases to 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:

- ❖ 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.
  - They thin 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.
  - Certain hormonal contraceptives may also be taken continuously to skip menstrual cycles and avoid cramping altogether. Some women will have light spotting with this method, especially during the first few months of use. Talk to your medical provider for more information.
- ❖ 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, probably as a result of decreased blood estrogen levels. 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, fish oil supplements, and ginger powder.
  - Herbal products including pycnogenol (pine bark) and fennel.
- ❖ Some 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](http://familydoctor.org), [mayoclinic.org](http://mayoclinic.org)