



PMS* PMS* Premenstrual Syndrome * Premenstrual Dysphoric Disorder

WHAT ARE PREMENSTRUAL SYNDROME AND PREMENSTRUAL DYSPHORIC DISORDER?

Premenstrual syndrome, also called PMS, includes both emotional and physical signs and symptoms. It affects a woman for a week or two before the start of her menstrual period. Symptoms go away shortly after her period starts.

Premenstrual dysphoric disorder, also called PMDD, is a more severe form of PMS, affecting about 3 to 6 percent of women. PMDD can interfere with daily life and make it hard for a woman to maintain relationships. Women who have had major depression are more likely than others to have PMDD.

DID YOU KNOW?

About 75 percent of women have PMS at some time before menopause.

WHAT ARE THE SIGNS AND SYMPTOMS OF PMS AND PMDD?

PMS and PMDD share the same physical signs and symptoms. The mood symptoms of PMDD, however, predominate and are more severe than those of PMS.

SIGNS AND SYMPTOMS OF PMS AND PMDD		
Physical signs and symptoms of PMS and PMDD	Emotional symptoms of PMS	Emotional symptoms of PMDD
 Fatigue Sleep problems (sleeping too much or too little) Headaches Joint pain and muscle aches Breast tenderness Weight gain and bloating from retaining fluid Changes in appetite (cravings, overeating, or lack of appetite) Constipation or diarrhea 	 Feeling Tense Anxious Depressed Angry and irritable Hopeless or worthless Crying spells and mood swings Trouble concentrating Withdrawal from family and friends 	 Feeling Very depressed and hopeless Extremely anxious and on edge Very angry or irritable Overwhelmed and out of control Suicidal Loss of interest in usual activities Trouble getting along with people/ withdrawal from others Crying spells and mood swings

HOW ARE PMS AND PMDD DIAGNOSED?

PMS and PMDD cannot be diagnosed by blood tests or other laboratory tests. Instead, health care providers rely on a woman's record of both mood and physical symptoms over two or three menstrual cycles, and when they occur in relation to her period.

For a diagnosis of PMDD, at least five mood symptoms must be present during most cycles in a year. They must interfere with everyday activities or relationships, and improve within a few days of the start of each period.

WHAT CAUSES PMS AND PMDD?

Doctors continue to search for the exact causes. Both PMS and PMDD might be related to changes in hormone levels during the menstrual cycle. Levels of brain chemicals called neurotransmitters, such as serotonin, may also play a part in causing PMS. Recent research shows that some women inherit a gene that raises their risk for PMDD. Other possible causes are undiagnosed depression and anxiety problems. If a woman has symptoms that don't stop shortly after her period starts, she may have another condition, such as depression.

WHAT IS THE TREATMENT FOR PMS AND PMDD?

PMS and PMDD may be treated with lifestyle changes and medicines (if needed). Some women also take vitamins and minerals. Many women find that a combination of treatments works best.

Dietary changes

- Eat small, frequent meals.
- Cut down on salt and salty foods.
- Choose fruits, vegetables, and whole grains.
- Eat plenty of high-protein foods.

Other lifestyle changes

- Try to exercise about 30 minutes a day, most days of the week.
- Take steps to reduce stress, such as massage, meditation, and learning to relax.
- Get enough sleep.
- Quit smoking.
- Decrease caffeine, which may worsen breast tenderness.

Vitamins and minerals

Consuming about 1,200 milligrams of calcium (in food and, if needed, in supplements) might help relieve symptoms. Some doctors also recommend vitamin D, vitamin E, vitamin B6, and magnesium.

Medicines

- Diuretics ("water pills")—medicines that increase urination and help relieve bloating.
- Painkillers, such as ibuprofen or naproxen.
- Birth control pills, also called oral contraceptives. They suppress the release of the egg from the ovary (ovulation) and keep hormone levels from changing during each month. However, some kinds of birth control pills cause mood problems and make symptoms worse.
- Gonadotropin-releasing hormone (GnRH) agonists. This type of medicine, given by injection monthly or every three months, temporarily stops the production of estrogen (a hormone) and prevents ovulation. This approach is reserved for very severe cases.
- Antidepressants, usually a selective serotonin reuptake inhibitor (SSRI).
- Anti-anxiety drugs such as alprazolam.

WHAT SHOULD YOU DO IF YOU SUSPECT YOU HAVE PMS OR PMDD?

Note when your period starts and stops, and keep a daily record for two or three menstrual cycles of when symptoms occur and how severe they are. Discuss your symptoms with your health care provider, who can then offer advice about diagnosis and treatment.

Questions to ask your doctor

- What is my diagnosis?
- What are my treatment options?
- What are the advantages and disadvantages of each of my treatment options?
- Should I see an endocrinologist for my condition?
- RESOURCES
- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Mayo Clinic:
- www.mayoclinic.com/health/premenstrual-syndrome/DS00134
 www.mayoclinic.com/health/pmdd/AN01372
- MedlinePlus (National Institutes of Health):
 www.nlm.nih.gov/medlineplus/premenstrualsyndrome.html
 - www.nlm.nih.gov/medlineplus/ency/article/007193.htm
- Facts for Health (PMDD): http://pmdd.factsforhealth.org
- HealthyWomen:
 www.healthywomen.org/condition/premenstrual-syndrome
 - www.healthywomen.org/condition/menstrual-disorders

EDITORS

Rogerio A. Lobo, MD JoAnn Pinkerton, MD The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (*www.endo-society.org*). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at *www.hormone.org/Spanish*.



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