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## Patient information: Premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) (Beyond the Basics)

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### PMS AND PMDD OVERVIEW

Premenstrual syndrome (PMS) refers to a group of physical and behavioral symptoms that occur in a cyclic pattern during the second half of the menstrual cycle. Premenstrual dysphoric disorder (PMDD) is the severe form of PMS. Common symptoms include anger, irritability, and internal tension that are severe enough to interfere with daily activities.

Mild PMS is common, affecting up to 75 percent of women with regular menstrual cycles; PMDD affects only 3 to 8 percent of women. This condition can affect women of any socioeconomic, cultural, or ethnic background.

PMDD is usually a chronic condition and can have a serious impact on a woman's quality of life. Fortunately, a variety of treatments and self-care measures can effectively control the symptoms in most women.

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### PMS AND PMDD CAUSES

Tissues throughout the body are sensitive to hormone levels that change throughout a woman's menstrual cycle ([figure 1](#)). Studies suggest that rising and falling levels of hormones (eg, estrogen and progesterone) may also influence chemicals in the brain, including a substance called serotonin, which affects mood.

However, it is not clear why some women develop PMS or PMDD and others do not. Levels of estrogen and progesterone are similar in women with and without these conditions. The most likely explanation, based upon several studies, is that women who develop PMDD are highly sensitive to changes in hormone levels.

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### PMS AND PMDD SYMPTOMS

**Common symptoms** — The most common symptoms of PMS and PMDD are fatigue, bloating, irritability, and anxiety. Other symptoms include the following (see "[Clinical manifestations and diagnosis of premenstrual syndrome and premenstrual dysphoric disorder](#)"):

- Sadness, hopelessness, or feelings of worthlessness
- Tension, anxiety, or "edginess"
- Variable moods with frequent tearfulness
- Persistent irritability, anger, and conflict with family, coworkers, or friends
- Decreased interest in usual activities
- Difficulty concentrating
- Fatigue, lethargy, or lack of energy
- Changes in appetite, which may include binge eating or craving certain foods
- Excessive sleeping or difficulty sleeping
- Feelings of being overwhelmed or out of control
- Breast tenderness or swelling, headaches, joint or muscle pain, weight gain

**Disorders that mimic PMS and PMDD** — Other conditions have symptoms that are similar to those of PMS and PMDD, including depression, anxiety disorders, and perimenopause (the four- to five-year period before menopause). It is important to distinguish between underlying depression (which often worsens before menses) and true PMS or PMDD because the treatments are quite different.

Women with underlying depression often feel better during or after menses, but their symptoms do NOT resolve completely. On the other hand, women with PMS or PMDD have a complete resolution of symptoms when their menses begin. Some women who think they have PMS or PMDD actually have depression or an anxiety disorder. (See "[Patient information: Depression in adults \(Beyond the Basics\)](#)".)

There are other medical disorders that worsen before or during menstruation, such as migraines, chronic fatigue syndrome, pelvic and bladder pain, or irritable bowel syndrome. A careful medical history should be able to distinguish among these disorders. It is also possible for a woman to have PMDD in addition to another medical condition. (See "[Patient information: Headache causes and diagnosis in adults \(Beyond the Basics\)](#)" and "[Patient information: Irritable bowel syndrome \(Beyond the Basics\)](#)" and "[Patient information: Diagnosis of interstitial cystitis/bladder pain syndrome \(Beyond the Basics\)](#)".)

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## PMS AND PMDD DIAGNOSIS

There is no single test that can diagnose PMS or PMDD. The symptoms must occur only during the second half (luteal phase) of the menstrual cycle, most often during the five to seven days before the menstrual period, and there must be physical as well as behavioral symptoms. In women with PMS or PMDD, these symptoms should not be present between days 4 through 12 of a 28-day menstrual cycle.

**Blood tests** — Blood tests are not necessary to diagnose PMS or PMDD. A blood count may be recommended to screen for other medical conditions that cause fatigue, such as anemia. Thyroid function tests can detect hypothyroidism (an underactive thyroid gland) or hyperthyroidism (an overactive thyroid gland), both of which have similar signs and symptoms to PMS and PMDD. (See "[Patient information: Hypothyroidism \(underactive thyroid\) \(Beyond the Basics\)](#)" and "[Patient information: Hyperthyroidism \(overactive thyroid\) \(Beyond the Basics\)](#)".)

**Recording symptoms** — Although a woman's symptoms may suggest PMDD, a clinician may request that she carefully record her symptoms on a daily basis for two full menstrual cycles ([table 1](#)). Using this calendar, a woman can rate the severity of 10 physical symptoms and 12 behavioral symptoms on a four-point scale.

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## PMS AND PMDD TREATMENT

