CONDITION

Premenstrual dysphoric disorder

Premenstrual dysphoric disorder causes severe mood and physical symptoms linked to the menstrual cycle.

WHAT IT IS
Severe cyclical mood symptoms before menstrual periods

BODY SYSTEM
Reproductive system and mental health

MAIN SYMPTOMS
Irritability, depression, anxiety, mood swings

WHAT CAUSES IT
Sensitivity to normal menstrual hormone changes

HOW IT IS DIAGNOSED
Daily symptom tracking across at least two menstrual cycles

MAIN TREATMENT
Antidepressants, hormonal treatment, and psychological support

CAN IT BE CURED?
No, but treatment often controls symptoms

IS IT AN EMERGENCY?
Sometimes, with suicidal thoughts or immediate danger

LONG-TERM OUTLOOK
Symptoms recur cyclically but usually improve with treatment

Overview

Premenstrual dysphoric disorder, or PMDD, is a severe condition linked to the menstrual cycle. It causes emotional, thinking, behavioural, and physical symptoms during the time before a period.

PMDD is more than feeling irritable or uncomfortable before menstruation. Symptoms are strong enough to disrupt work, education, relationships, parenting, or everyday activities.

Symptoms usually begin during the final week or two before a period. They improve within a few days after bleeding starts and are minimal or absent during the week after the period. This clear cycle is an important part of PMDD.

PMDD appears to involve an unusual sensitivity to normal changes in reproductive hormones.

It is not caused by having "too many" or "too few" hormones, and it is not a personal weakness.

Other conditions can become worse before a period. This is called premenstrual exacerbation. For example, depression may be present throughout the month but become more severe before menstruation. This differs from PMDD, which has a mostly symptom-free phase after the period.

Symptoms

Mood symptoms are central to PMDD. At least one main symptom involves severe irritability, depressed mood, anxiety, or rapid mood changes.

Possible symptoms include:

Diagnosis requires a group of symptoms rather than one symptom alone. The symptoms must also cause significant distress or interfere with daily life.

PMDD can affect relationships because anger, rejection sensitivity, or withdrawal may appear predictably each month. Some people have difficulty working or studying during the most symptomatic days.

The pattern matters as much as the symptoms. Similar symptoms that continue throughout the month may point to depression, anxiety, bipolar disorder, a thyroid problem, perimenopause, or another condition.

- Marked irritability, anger, or increased conflict
- Depression, hopelessness, or harsh self-critical thoughts
- Anxiety, tension, or feeling "on edge"
- Sudden sadness, tearfulness, or sensitivity to rejection
- Loss of interest in usual activities
- Trouble concentrating
- Low energy
- Changes in appetite, cravings, or overeating
- Sleeping much more or less than usual
- Feeling overwhelmed or out of control
- Breast tenderness, bloating, headaches, or joint and muscle pain

Causes and risk factors

PMDD is thought to result from the brain being especially sensitive to the normal rise and fall of estrogen and progesterone during the menstrual cycle. These hormone changes affect brain chemicals involved in mood, including serotonin. Changes in allopregnanolone, a substance made from progesterone that acts in the brain, may also play a role.

Hormone levels are often within the expected range. Routine hormone testing therefore cannot confirm PMDD.

PMDD can run in families, suggesting that inherited factors may contribute. A history of depression, anxiety, severe stress, or trauma may also be associated with a higher risk. These factors do not mean that someone will develop PMDD.

Symptoms occur during menstrual cycles in which ovulation happens. They may change when cycles become irregular, such as during perimenopause. Hormonal contraception can improve symptoms for some people, have little effect for others, or cause new mood symptoms.

Diagnosis

There is no blood test, scan, or single appointment that can confirm PMDD. Diagnosis is based on the type, timing, and effect of symptoms.

You will usually be asked to record symptoms every day for at least two menstrual cycles. A structured chart, diary, or symptom-tracking app can help show whether symptoms consistently appear before periods and improve soon after bleeding begins. Recording symptoms daily is more reliable than trying to remember the month afterward.

The diagnostic pattern includes at least five symptoms, with at least one involving severe irritability, depressed mood, anxiety, or mood swings. Symptoms must interfere with everyday functioning and cannot be better explained by another condition.

A healthcare professional may ask about symptoms during the rest of the month, current medicines, hormonal contraception, pregnancy, substance use, and previous mental health concerns. They may also ask directly about self-harm or suicidal thoughts.

Tests may be used to look for other explanations, such as a thyroid disorder, anemia, or pregnancy, when your history or other symptoms suggest these possibilities. These tests do not diagnose PMDD.

Tracking may take longer if periods are irregular or absent. Assessment can also be more complex when another mood condition is present throughout the month.

Treatment and management

Treatment is chosen according to symptom severity, other health conditions, contraception or pregnancy plans, and personal preferences. More than one approach may be needed.

Selective serotonin reuptake inhibitors like sertraline or fluoxetine , or SSRIs, are antidepressants that can reduce both emotional and physical PMDD symptoms. Unlike their use in depression, they may help PMDD relatively quickly. They may be taken every day or only during the part of the cycle when symptoms are expected. The appropriate schedule should be agreed with a prescriber.

Possible SSRI side effects include nausea, sleep changes, headache, reduced sexual interest, and difficulty reaching orgasm. Do not stop a prescribed antidepressant suddenly without medical advice.

Combined hormonal contraceptives stop ovulation and may help some people. Evidence is strongest for certain pills containing drospirenone with a short or absent hormone-free interval. Hormonal contraception does not improve mood for everyone, so symptom monitoring remains useful.

Practical and psychological approaches can support medical treatment. These may include:

Lifestyle changes alone may not be enough for severe PMDD. This does not mean that you have failed to manage the condition.

For symptoms that remain severe, a specialist may consider medicines called gonadotropin-releasing hormone agonists. These temporarily switch off ovarian hormone cycling and create a reversible menopause-like state. They can affect bones and cause hot flushes, so additional hormones and careful monitoring may be needed.

Surgery to remove the ovaries permanently stops menstrual cycling but causes immediate menopause and ends natural fertility. It is reserved for rare, disabling cases that have not responded to other treatments, usually after a successful trial of temporary ovarian suppression.

- Cognitive behavioural therapy to manage distressing thoughts and behaviours
- Regular sleep, meals, and physical activity
- Planning demanding tasks around predictable symptom days when possible
- Reducing alcohol if it worsens sleep, anxiety, or mood
- Sharing the symptom pattern with trusted people

Complications

Untreated or poorly controlled PMDD can repeatedly affect employment, education, finances, close relationships, and self-esteem. Because symptoms return each cycle, the disruption can build over time.

Depression, anxiety, and other mental health conditions can occur alongside PMDD. Identifying both matters because treatment may need to cover symptoms throughout the month, not only the premenstrual phase.

Some people experience suicidal thoughts during severe episodes. These thoughts should always be taken seriously, even if they usually lift after menstruation begins.

Treatment can also have unwanted effects. Antidepressants may affect sleep, digestion, or sexual function. Hormonal treatment may cause bleeding changes or mood effects. Temporary ovarian suppression can produce menopause-like symptoms. Follow-up allows treatment to be adjusted safely.

Prevention

PMDD cannot reliably be prevented because it reflects sensitivity to normal menstrual hormone changes. It is not caused by poor coping, diet, or lack of exercise.

Daily tracking may help you recognise the pattern earlier and seek treatment before repeated episodes cause greater disruption. Once diagnosed, taking treatment as agreed and planning for higher-risk days may reduce the effect on daily life.

If symptoms return after treatment is changed or stopped, this does not mean the condition has become permanent or untreatable. It may mean that the management plan needs to be reviewed.

Living with it and what to expect

PMDD usually follows a repeating monthly pattern while ovulation continues. The severity can change between cycles. Stress, poor sleep, illness, major life events, and changing reproductive stages may affect how manageable symptoms feel.

Many people improve with treatment, although finding the best option can take time. A daily symptom record helps show whether a treatment is working and whether benefits continue across several cycles.

Some people arrange lighter workloads, extra childcare support, or fewer social commitments

during predictable symptom days. Clear conversations with partners, family members, or employers may reduce misunderstandings. You can decide how much personal information to share.

PMDD symptoms often pause during pregnancy because normal ovulatory cycles stop. This does not guarantee protection from depression or anxiety during pregnancy or after birth. A previous history of mood symptoms should be discussed during maternity care.

During perimenopause, cycles become less predictable and symptoms may change or worsen. After natural menopause, PMDD ends because ovulation and menstrual cycling stop. Mood symptoms that continue after menopause require a separate assessment.

Routine follow-up is useful after starting or changing treatment. It gives you a chance to review symptom charts, side effects, daily functioning, and any changes in pregnancy or contraception plans.

When to get medical help

Arrange a routine appointment if symptoms repeatedly appear before periods and affect work, relationships, education, sleep, or daily activities. Bring a symptom diary if you have one, but do not delay seeking help simply because you have not completed two months of tracking.

Seek prompt medical advice if symptoms become more severe, continue throughout the month, or change after starting a medicine or hormonal contraceptive. New periods of unusually high energy, very little need for sleep, impulsive behaviour, or racing thoughts also need assessment because they may suggest another mood condition.

Get same-day urgent help if you are having thoughts of self-harm or suicide, even if you do not intend to act on them.

Call emergency services or go to an emergency department if you have a suicide plan, intend to act, have already harmed yourself, or cannot stay safe. If possible, remain with someone you trust and move away from anything you could use to hurt yourself.

Common questions

Is PMDD the same as PMS?

No. Premenstrual syndrome, or PMS, can cause emotional and physical symptoms before a period, but PMDD is more severe. PMDD causes marked distress or interferes with major parts of daily life.

How do I know if I have PMDD?

The strongest clue is a repeated pattern of severe symptoms before a period that improve soon after bleeding starts. Daily symptom tracking for at least two cycles is normally needed. A healthcare professional must also consider other conditions that can cause similar symptoms.

Does PMDD go away when my period starts?

Symptoms usually improve within a few days after bleeding begins. They should become minimal or absent during the week after the period. If depression, anxiety, or irritability continues all month, another condition may be present alongside or instead of PMDD.

Can birth control cause or treat PMDD?

Hormonal contraception can improve PMDD for some people by stopping ovulation. Certain combined pills have better evidence than others. Some people notice no improvement or develop unwanted mood effects, so the response should be monitored.

Does pregnancy stop PMDD?

PMDD symptoms generally pause during pregnancy because menstrual cycles and ovulation stop. They may return when cycles restart after birth. Pregnancy does not prevent other mood conditions, including depression during pregnancy or after delivery.

Is PMDD "just a hormone imbalance"?

No. Most people with PMDD have normal reproductive hormone levels. The condition appears to involve increased brain sensitivity to normal hormone changes across the menstrual cycle.

Sources

- American College of Obstetricians and Gynecologists. Clinical Practice Guideline No. 7: Management of Premenstrual Disorders . Obstetrics & Gynecology. 2023.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision . 2022.
- Royal College of Obstetricians and Gynaecologists. Management of Premenstrual Syndrome . Green-top Guideline No. 48. 2017.
- O'Brien PMS, Marjoribanks J, Brown J, et al. ISPMD consensus on the management of premenstrual disorders . Archives of Women's Mental Health. 2013.
- Carlini SV, Deligiannidis KM. Evidence-based treatment of premenstrual dysphoric disorder: a concise review . Journal of Clinical Psychiatry. 2020.