

Premenstrual syndrome

Premenstrual syndrome, or PMS, refers to the range of physical and emotional symptoms that many women experience in the lead-up to the period (menstruation). These symptoms resolve once the woman's period begins and there is at least one symptom-free week before the symptoms return. It is thought that most menstruating women have premenstrual symptoms, ranging from relatively mild to severe.

PMS is a complex condition that involves physical and emotional symptoms. The latest research points to changes in brain chemicals (neurotransmitters) in the time after ovulation and before menstruation. Life stressors and a genetic vulnerability may also play a role. Although the cause isn't conclusively known, PMS can be managed with various medications and other strategies.

Symptoms

PMS differs from one woman to the next. The wide range of PMS symptoms can include:

- Abdominal bloating
- Acne
- Anxiety
- Clumsiness
- Confusion
- Depression and lowered mood, which may include suicidal thoughts
- Difficulties in concentration
- Digestive upsets, including constipation and diarrhoea
- Drop in self-esteem and confidence
- Drop in sexual desire, or (occasionally) an increase
- Feelings of loneliness and paranoia
- Fluid retention
- Food cravings
- Headache and migraine
- Hot flushes or sweats
- Increased appetite
- Increased sensitivity to sounds, light and touch
- Irritability, including angry outbursts
- Memory lapses
- Mood swings
- Sleep changes, including insomnia or excessive sleepiness
- Swollen and tender breasts
- Weepiness.

PMS and the menstrual cycle

The menstrual cycle is controlled by a complex interaction of hormones from the ovary and parts of the brain. The ovary contains many eggs (ova). Every cycle one egg matures and is released – this is called ovulation. After ovulation, oestrogen and progesterone hormones are released in the premenstrual phase of the cycle. These hormones stimulate the lining of the uterus to prepare for pregnancy. If a pregnancy doesn't occur, the hormones decline, the period begins and the lining is shed. PMS ceases at menopause.

The causes are unknown

The cause of PMS remains unknown, although it is thought that several factors are responsible. Current theories include:

- **Brain and hormonal interactions** – recent research indicates that PMS may be caused by changes in brain chemistry, such as serotonin, and its interaction with the hormonal system. These changes occur during the premenstrual time.
- **Progesterone** – it seems logical to assume that progesterone is the catalyst, since PMS occurs when progesterone levels are high and resolves once levels fall at menstruation. However, this link hasn't been conclusively established. The progesterone theory suggests that the sex hormone interacts with other hormones and brain chemicals to produce the symptoms of PMS.
- **Endocrine system** – some women with PMS have disorders of the endocrine (hormonal) system, such as problems with their thyroid. However, this could just be coincidence, since most women with PMS do not have hormonal disorders.
- **Diet** – dietary deficiencies of some minerals and vitamins are known to produce some of the symptoms of PMS.
- **Stress** – there is evidence to suggest that emotional stress worsens PMS symptoms. Events such as childbirth or discontinuing oral contraceptives, surgery or a stressful event can trigger PMS or worsen PMS symptoms.

Premenstrual dysphoric disorder (PMDD)

About five per cent of menstruating women suffer from seriously debilitating PMS, which is sometimes known as premenstrual dysphoric disorder (PMDD). The symptoms are so severe that an affected woman is unable to live her normal life. The classification of PMDD is controversial. It is included as a depressive disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), but the health profession is divided over whether PMDD should be classed as a mental disorder. Supporters of the inclusion say that PMDD shares many of the same characteristics of a major depressive disorder. Critics point out that PMDD is biologically driven and shouldn't be classed as a mental illness because symptoms resolve once menstruation begins.

Diagnosis

There are no specific diagnostic tests for PMS, as hormone levels are usually within the normal range. Diagnosis relies on an examination of the woman's medical history and description of the symptoms. In most cases, you can identify if you have PMS by keeping a symptoms diary. Include the details of your menstrual cycle – for example, the first and last days of your menstrual period – and any ovulation symptoms. Keep this diary for at least three menstrual cycles. If the symptoms don't resolve at menstruation, other causes may be suspected and would need to be investigated.

Types of help available

There is no cure for PMS, but a range of treatments are available to help you manage your symptoms. The different types of treatment available include:

- **Hormonal treatments** – these help to suppress ovulation and reduce the hormones of the premenstrual phase. Hormone therapies include the oral contraceptive pill, oestrogen therapy, GnRH agonists, Mirena IUD, Danazol, Depo-Provera and, only rarely, surgery with bilateral salpingo-oophorectomy.
- **Other medications** – there are a range of medications available that may help, such as selective serotonin reuptake inhibitors (SSRIs), anti-prostaglandin and anti-inflammatories, and diuretics (fluid pills).
- **Vitamins, minerals and herbs** – many supplements have been shown to be helpful for PMS, such as calcium, magnesium, chaste tree (also known as chaste berry or *vitex agnus castus*) and St John's Wort. Always consult your doctor before taking any supplement, as they may have unwanted effects or interactions with other medications.
- **Cognitive behavioural relaxation therapy** – uses one or a variety of relaxation techniques to relieve psychological and/or physical symptoms.
- **Complementary therapies** – such as acupuncture or naturopathy.

Many of these treatments can have side effects, so make sure you are well informed about them before you and your doctor decide on your treatment.

Self-help options

PMS responds to self-help. Options include:

- Note your symptoms daily in a diary.

- Reduce caffeine and alcohol, particularly during the premenstrual phase.
- Don't smoke.
- Exercise regularly, especially during the premenstrual phase, as increasing endorphins may reduce symptoms.
- Get plenty of rest and good quality sleep.
- Reduce stress generally, especially during the premenstrual phase. Communicate with family and friends to reduce your stress at this time.
- Try to maintain a good diet, low in sugar and salt.

Where to get help

- Your doctor
- Women's health clinic
- Family Planning Victoria Tel. 1800 013 952 or (03) 9257 0100

Things to remember

- Premenstrual syndrome (PMS) refers to the range of physical and emotional symptoms that some women experience in the lead-up to menstruation.
- The symptoms stop once the menstrual period begins. There is at least one symptom-free week before the symptoms start returning.
- Keep a detailed diary for at least three menstrual cycles to work out if your symptoms are caused by PMS.

This page has been produced in consultation with, and approved by:

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