

Premenstrual Syndrome

Premenstrual syndrome can cause various symptoms before periods. In some women, the symptoms can badly affect quality of life before periods. There are various treatment options which are discussed below.

What is the premenstrual syndrome?

The premenstrual syndrome (PMS) is a condition in women where certain symptoms occur each month before a period. PMS is sometimes called premenstrual tension (PMT) - but increased tension may not be the only symptom.

What are the symptoms of premenstrual syndrome?

Many different symptoms have been reported. The most common are listed below. You may have just one or two symptoms, or have several.

- **Psychological (mental) symptoms include:** tension, irritability, tiredness, feelings of aggression or anger, low mood, anxiety, loss of confidence, feeling emotional. You may have a change in your sleep pattern, in sexual feelings and in appetite. Relationships may become strained because of these symptoms.
- **Physical symptoms include:** breast swelling and/or pain, abdominal bloating, swelling of the feet or hands, weight gain, an increase in headaches. If you have epilepsy, asthma, migraine or cold sores, you may find that these conditions become worse before a period.

Who gets premenstrual syndrome?

PMS most commonly affects women aged 30-40 years. However, it can affect you at any age, even if you are less than 20 years old. Most women can tell that a period is due by the way they feel both physically and mentally. For most, the symptoms are mild and do not cause too much bother.

About one in twenty women have 'true' PMS. This is where the symptoms become bad enough to disrupt your normal functioning and quality of life. Day-to-day life and work performance can be affected. It may cause tension with family and friends.

How is premenstrual syndrome diagnosed?

There is no test for PMS. The diagnosis of PMS is based on your symptoms.

Sometimes it is difficult to tell if your symptoms are due to PMS, or if they are due to other conditions such as anxiety or depression.

It can often be difficult to remember when symptoms occur. A doctor may ask you to keep a diary of symptoms over a couple of months or so. It is when the symptoms occur, not just their nature or type, that indicates PMS. This means that if you have PMS:

- Symptoms start sometime after ovulation, which occurs about two weeks before the start of a period. Typically, symptoms occur during the five days before a period. However, some women have symptoms for two weeks or so leading up to a period. Typically, symptoms gradually get worse as the period approaches.
- Symptoms go within three to four days after your period starts.
- Symptoms that occur all the time are not due to PMS.

What causes premenstrual syndrome?

The cause is not known. It is not due to a hormone imbalance, or due to too much or too little of any hormone (as was previously thought). However, ovulation (when you release an egg from an ovary each month) appears to trigger symptoms. It is thought that women with PMS are more 'sensitive' to the normal level of progesterone. This hormone is passed into the bloodstream from the ovaries after you ovulate.

One effect of over-sensitivity to progesterone seems to reduce the level of a brain chemical (neurotransmitter) called serotonin. This may lead to symptoms, and may explain why medicines that increase the serotonin level work in PMS.

What can I do to help?

The following may help:

- **Be aware.** It may help if you understand what is happening. This may relieve some of the anxiety about symptoms. It may be useful to keep a chart or diary. Note the days you feel irritable, low, anxious, or have any other symptom that you feel may be part of PMS. See how long symptoms last before a period. Then it may be worth noting in a diary when your periods are due. As you can predict when your PMS symptoms are likely to occur, you can expect them and be ready for them. For example, it may be possible to avoid doing important things on the days when symptoms are expected.
- **Talk about it** with your family, friends or partner. It may help them to understand how you are feeling. It may be best to do this after your period when you are more likely to be calm.
- **Exercise.** Some women who exercise regularly say they have less problem with PMS. Try doing some regular exercise several times a week.
- **Food and drink.** Some people claim that various diets help to ease PMS. Reducing the amount of carbohydrates you eat before your period may help.
- **Reduce caffeine and alcohol intake.** Some women find that alcohol or caffeine (found in tea, coffee, cola, etc) makes their symptoms worse. So it may be worth a trial of not having alcohol or caffeine prior to periods to see if this helps.

What are the treatment options for premenstrual syndrome?

Various treatments have been advocated for PMS. The treatment of PMS is a changing area as research continues to clarify which treatments actually work and to try to find better treatments. The following gives a brief description of the main current treatment options:

Not treating is an option

Understanding the problem, anticipating symptoms and planning a coping strategy are all that is required for many women. Some women find the self-help measures listed above and such things as avoiding stress or doing relaxation exercises prior to a period can help.

Treatments that you can buy without needing a prescription

Various products are sold for the treatment of PMS. Although there is a small amount of evidence to support the use of the following, the current evidence is still quite limited:

- **Calcium.** Some studies have shown that taking calcium (1000-1200 mg a day) may improve premenstrual symptoms.
- **Magnesium.** Taking magnesium (200-400 mg a day) during the two weeks before a period may improve symptoms.
- **Agnus castus.** This may provide some benefit in some women.

Treatments that your doctor may prescribe

These treatments have been shown in studies to be the most effective for women with PMS. Your doctor may recommend at least one of these treatments for you.

Selective Serotonin Re-uptake Inhibitors (SSRIs)

An SSRI medicine is commonly prescribed to treat more severe PMS. These medicines were first developed to treat depression. However, they have also been found to ease the symptoms of PMS, even if you are not depressed. They work by increasing the level of serotonin in the brain (see above in 'What causes premenstrual syndrome?'). You have a good chance that symptoms of PMS will become much less if you take an SSRI.

Research suggests that taking an SSRI for just half of the cycle (the second half of the monthly cycle) is just as effective as taking an SSRI all of the time. Side-effects occur in some women, although most women have no problems taking an SSRI. There are various types and brands.

The combined oral contraceptive pill (COCP)

In theory, preventing ovulation should help PMS. This is because ovulation, and the release of progesterone into the bloodstream after ovulation, seems to trigger symptoms of PMS. The COCP (known as 'the pill') works as a contraceptive by preventing ovulation.

However, most pills do not help with PMS as they contain progestogen hormones (with a similar action to progesterone). A newer type of pill called Yasmin® contains a progestogen called drospirenone which does not seem to have the downside of other progestogens. If you have PMS and require contraception, then this pill may be a possible option to use for both effects. If you take this, your doctor may advise you to reduce the pill-free week to only four days, or even run three packets together without having a break.

Cognitive-behavioural therapy (CBT)

This is a talking treatment (psychological treatment), during which, ways to find more adaptive ways of coping with premenstrual symptoms are explored. This has been shown to be effective for some women.

Oestrogen

Oestrogen given via a patch or gel has been shown to improve symptoms. Oestrogen tablets are not effective though. However, you will also need to take progestogens if you have not had a hysterectomy. These can be taken as tablets or by having the intrauterine system (Mirena®) inserted. The doses of oestrogen in a patch are much lower than in the COCP, so a patch does **not** work as a method of contraception.

Other treatments

These treatments may be used sometimes in the treatment of PMS. However, for some of these treatments there is still not good evidence from research trials that they are effective.

- **Gonadotrophin-releasing hormone analogues** are drugs that can prevent ovulation. Although these often work well, side-effects commonly occur which limit their usefulness for PMS.
- **Vitamin B6 (pyridoxine)**. This vitamin is part of a normal diet, but extra amounts are thought to help with PMS. However, the evidence to support this is still conflicting. You can take the vitamin tablets either in the two weeks before periods, or every day. **Note:** do **not** take more than the recommended dose of 10 mg a day, as too much vitamin B6 can be harmful.
- **St John's wort**. This is a herbal remedy which can be bought from pharmacies. However, there is only very limited evidence that it is effective.
- **Bright light**. One study showed improvement in symptoms in some women with severe PMS who looked at bright light from a face mask for a time each day. This is

a similar treatment to that used for a condition called 'seasonal affective disorder'. The reason why bright light may help in PMS is not known. More research is needed to clarify if this is a useful treatment.

- **Surgery** to remove both ovaries prevents ovulation and is likely to cure PMS. However, it is a very drastic treatment and is therefore not done except in the most severe cases where nothing else has helped.

Treatments for specific symptoms

Some women just have one or two physical symptoms. The following treatments may help a specific physical symptom but are unlikely to help psychological symptoms (unless the physical symptom is causing or aggravating the irritability, anxiety, etc):

- Diuretics ('water tablets') - in particular, spironolactone, which can sometimes help reduce fluid retention and bloating.
- Anti-inflammatory painkillers (for example, ibuprofen) may ease painful symptoms.
- Evening primrose oil may ease breast discomfort.

Treatments for PMS may take a while to work fully. If you start a treatment, try it for several months before deciding if it is helping or not. It can be difficult to remember how things were several months ago. If you keep a diary of symptoms, it will help you decide if you are better with treatment than you were before. Treatments may not cure symptoms completely. However, the symptoms often become a lot easier or less frequent with treatment.

Further help and information

NAPS - National Association for Premenstrual Syndrome

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Comprehensive patient resources are available at www.patient.co.uk

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