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Premenstrual Syndrome (PMS, PMT)

Premenstrual syndrome (PMS) can cause various symptoms before periods. In some women the symptoms can badly affect their quality of life. Various treatment options are available.

Symptoms of PMS are common, but vary considerably in how severe they are. For most women, premenstrual symptoms may be distressing but do not disrupt normal functioning and quality of life.

PMS can affect women of any age between puberty and the menopause. The term PMS is used when symptoms become bad enough to disrupt normal functioning and quality of life. Day-to-day life and performance at work can be affected. It may cause tension with family and friends.

What is premenstrual syndrome (PMS)?

Premenstrual syndrome (PMS) is the name given for various symptoms you may experience in the weeks before your period.

'Physiological premenstrual symptoms' refers to premenstrual symptoms (eg, abdominal bloating, breast tenderness, headache, acne, constipation, or mood changes) that do not cause any impairment of activities of daily living or affect quality of life. Up to 9 out of every 10 women having menstrual periods will experience physiological premenstrual symptoms.

Premenstrual syndrome (PMS) is when symptoms cause significant personal, interpersonal or functional problems

Premenstrual dysphoric disorder (PMDD) is used to describe a severe form of PMS.

PMS symptoms

Many different symptoms have been reported. The most common are listed below. You may have just one or two symptoms, or you may have a number of different symptoms:

Mental (psychological) symptoms

- Tension, irritability.
- Tiredness.
- Feelings of aggression or anger.
- Mood swings.
- Anxiety.
- Loss of confidence.

Alongside emotional symptoms, you may have a change in your sleep pattern, in sexual feelings and in appetite which can affect your general mental health. Relationships may become strained because of these symptoms.

Physical symptoms

- Swollen or tender breasts.
- Tummy (abdominal) bloating.
- Swelling of the feet or hands.
- Weight gain.
- Increase in headaches.

Behavioural symptoms

- Reduced cognitive ability (thinking, learning, reading, remembering, speaking, listening and paying attention).
- Aggression.

If you have epilepsy, asthma, migraine or cold sores, you may find that these conditions become worse before a period.

What causes PMS?

The cause is not known. It is not due to imbalanced hormone levels, or due to too much or too little of any hormone (as was previously thought). However, the release of an egg from an ovary each month (ovulation) 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 brain chemicals (neurotransmitters) called serotonin and gamma-aminobutyric acid (GABA). This may lead to symptoms, and may explain why medicines that increase the level of the brain chemical serotonin work in PMS.

When does PMS start?

PMS symptoms can start at any age from when periods begin (pubery). They often begin in your mid-20s, but can become worse between ages 35 and 40.

Within each menstrual cycle, PMS symptoms can vary a great deal in terms of the nature of the symptoms, their severity and how long they last. However, PMS symptoms typically begin in the week before your period, and last until five or so days after the start of your period.

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. Your doctor may ask you to keep a diary of symptoms over a couple of months. It is when the symptoms occur that indicates PMS, not just their nature or type.

If you have PMS you may have:

- Symptoms that start sometime after ovulation (when you release an egg from an ovary each month), 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 become worse as the period approaches.
- Symptoms that go within three to four days after your period starts.

Symptoms that occur all the time are not due to PMS.

How to reduce PMS symptoms

The following may help:

Read about it

It may help you to 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, or anxious, or have any other symptoms that you feel in your everyday lifethat 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

Make sure to be honest and 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 symptoms have eased.

Exercise

Some women who exercise regularly say they have less of a 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. However, there is little evidence from research trials that this is true. Reducing the amount of sugar, sugary drinks and refined carbohydrates you eat within a balanced diet before your period may help your symptoms.

Carbohydrates with a lower glycaemic index give a slower steadier release of sugar, and may be a better choice for some women with PMS. (eg, granary/wholemeal bread rather than white bread). Smaller more frequent meals may suit better than infrequent large meals.

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?

Many treatments for PMS have been tried over the years. There are very few that have been proven to work. 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 to 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.

Not treating is an option

Understanding the problem, knowing when the symptoms are coming 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 herbal products, vitamins and minerals are sold for the treatment of PMS. The ones which have been studied most include magnesium, vitamin B6 (pyridoxine), calcium, and agnus castus. The evidence is mixed and it is not clear yet if they have any effect. Some studies suggest some of them are helpful, whereas others suggest they are not.

There is not enough evidence yet to know if they can be recommended, and if so, in what dose. They are unlikely to do much harm as long as you do not exceed the dose suggested on the label, so you may wish to give one or more of these treatments a try.

Evening primrose oil or simple painkillers such as ibuprofen or paracetamol may help with breast tenderness.

Cognitive behavioural therapy (CBT)

CBT 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. If it is helpful, it avoids the need for taking medicines, which may potentially have side-effects, so it is worth considering as an option.

Selective serotonin reuptake inhibitors (SSRIs)

An SSRI medicine (for example, fluoxetine or citalopram) may be prescribed to treat more severe PMS. These medicines were 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 menstrual 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. Although commonly used for PMS, and licensed for it elsewhere, these medicines are not licensed for PMS specifically in the UK.

The combined oral contraceptive (COC) pill

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 COC pill (known as 'the pill') works as a contraceptive by preventing ovulation.

However, pills do not always help with PMS, as they contain progestogen hormones (with a similar action to progesterone). One type of COC pill contains a progestogen called drospirenone which may not have the downside of other progestogens. (The first of these was called Yasmin® although there are now other brands with the same hormones.) This may be better than other pills for PMS symptoms, but research is ongoing.

If you have PMS and require contraception then the pill may be a possible option to use for both effects. If you take the pill, you should talk to your doctor as they may advise you to take it without having a break between packets, as this may have further benefits.

Oestrogen

Oestrogen given via a patch or gel has been shown to improve symptoms by suppressing egg production. 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 an intrauterine system (IUS) can be inserted. The doses of oestrogen in a patch are much lower than in the COC pill, so the patch is not a method of contraception, but the IUS is.

Other treatments

Other methods of suppressing ovulation include medicines called gonadotrophin-releasing hormone analogues. These medicines are only used for very severe PMS. They are usually advised by specialists and given by injection and with hormone replacement therapy (HRT) to protect your bones and prevent symptoms of menopause.

A medicine called danazol is occasionally used by specialists. It may cause side-effects (such as weight gain, excess hair, acne and a deeper voice) so it is not used very often. It is extremely important to use contraception when taking danazol as it can cross the placenta and damage the baby if a pregnant woman takes it.

Surgery to remove the womb and both ovaries (hysterectomy and bilateral salpingo-oophorectomy) also prevents ovulation and will cure PMS, although is a drastic option. Because of this, it is only done in the most severe cases where nothing else has helped.

What is the outlook (prognosis)?

Women with PMS tend to be affected throughout their reproductive lives, although symptoms usually settle during pregnancy. How troublesome or otherwise PMS is seems to fluctuate. So there may be times in your life when you are not affected by it, and other times when it is very severe. It may get worse at certain times - for example, in times of stress.

Further reading & references

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Last updated by: Dr Colin Tidy, MRCGP	Peer reviewed by: Dr Hayley Willacy, FRCGP	
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