

# Menstruation and Migraine

This fact sheet outlines the impact of menstruation on migraine for women, including information on menstrual migraine.

## What is migraine?

Migraine is a complex condition with a wide variety of symptoms. For many people the main feature is a painful headache. Other symptoms can include disturbed vision, sensitivity to light, sound and smells, feeling sick and vomiting. Migraines can be very frightening and may result in you having to lie still for several hours.

## Puberty

Most women who experience migraine have their first attack during their teens, many around the time of their first period. The psychological impact of having these two events together can be traumatic.

## The impact of the menstrual cycle

Around 50% of women with migraine say their menstrual cycle directly affects this. The whole menstrual cycle, not just your period, is associated with biological changes in your body, both physical and psychological. Sex hormones, oestrogen and progesterone, and the physical and chemical processes that go towards producing them, all have a widespread effect on your body.

It has long been recognised that there is a close relationship between female sex hormones and migraine. Some women are more sensitive to the fluctuations within the menstrual cycle. Studies suggest that migraine can be triggered by a drop in oestrogen levels such as those which naturally occur in the time just before your period. Factors such as the release of prostaglandin (a naturally occurring fatty acid that acts in a similar way to a hormone) may also be implicated at this time.

## Keeping a diary

Keeping a diary card for at least three months is an effective way to show if there is any link between your migraine and your periods. After three months you can review your diary and see if your migraine can be managed better. You will need to take your diary card to your GP so that you can discuss the best course of action to manage your migraine. This may include information on: when the head pains started, how often they happen, if there are other symptoms (such as being sick or having vision problems), how long the attacks last and where the pain is. It is helpful to record as many aspects of your daily life as possible, such as what and when you eat, your medication, the exercise you take and other factors such as the weather. It is often useful noting if you did anything different prior to the attack. The 48 hours before the migraine attack are particularly important to record. The diary may then highlight a particular hormonal connection.

Start recording your migraine attacks now with an [online migraine diary](#) or read our [Migraine Diaries fact sheet](#).

## Menstrual migraine

Whilst many women report that menstruation is a migraine trigger, there is a specific condition known as “menstrual migraine”. Menstrual migraine is associated with falling levels of oestrogen. Studies show that migraine is most likely to occur in the two days leading up to a period and the first three days of a period. There is no aura with this type of migraine and it can often last longer than other types. This type of migraine is thought to affect fewer than 10% of women. The two most accepted theories on the cause for menstrual migraine at the moment are:

1. the withdrawal of oestrogen as part of the normal menstrual cycle and
2. the normal release of prostaglandin during the first 48 hours of menstruation.

There are no tests available to confirm the diagnosis, so the only accurate way to tell if you have menstrual migraine is to keep a diary for at least three months recording both your migraine attacks and the days you menstruate. This will also help you to identify non-hormonal triggers that you can try to avoid during the most vulnerable times of your menstrual cycle.

## **Treating menstrual migraine**

There are several treatment options depending on the regularity of your menstrual cycle, whether or not you have painful or heavy periods, menopausal symptoms or you also need contraception. Although none of these options are licensed specifically for menstrual migraine, they can be prescribed for this condition if your doctor feels they would benefit you.

If you have migraine and heavy periods, taking an anti-inflammatory painkiller such as mefenamic acid could help. Mefenamic acid is an effective migraine preventative and is also considered to be helpful in reducing migraine associated with heavy and/or painful periods. A dose of 500 mg can be taken three to four times daily. It can be started 2 to 3 days before the expected start of your period. If your periods are not regular, it is often effective when started on the first day. It is usually only needed for the first two to three days of your period. Naproxen can also be effective in doses of around 500 mg once or twice daily around the time of menstruation.

You may wish to discuss using oestrogen supplements with your doctor. Topping up your naturally falling oestrogen levels just before and during your period might help if your migraine occurs regularly before your period. Oestrogen can be taken in several forms such as skin patches or gel. You put the patch on your skin for 7 days starting from 3 days before the expected first day of your period. Similarly, you rub the gel onto your skin for 7 days. In this way the oestrogen from the patch or gel is absorbed directly into your blood stream. You should not use oestrogen supplements if you think you are pregnant or you are trying to get pregnant. Again keeping a diary of your migraines will help you to judge when best to start the treatment.

If your periods are irregular your doctor may suggest other ways to try and maintain your oestrogen levels at a more stable rate such as a combined oral contraceptive pill.

## **Migraine and the premenstrual syndrome**

Premenstrual syndrome (PMS) affects between 70% and 90% of fertile women. Migraine and headaches can occur as part of the PMS alongside other symptoms of PMS such as sore

breast, low mood and feeling irritable. To determine if your migraine is part of PMS you will need to keep a diary card for at least 3 menstrual cycles. In this way you can see if you have a pattern of symptoms during the second half of your menstrual cycle which reduce when the bleeding starts.

## **Treating migraines associated with PMS**

The effectiveness of drug treatment for PMS is limited and there is little clinical evidence available. If you suffer from PMS and migraine you may be best to start managing the PMS through other routes such as lifestyle changes and relaxation. You may find that it helps to eat frequent and small carbohydrate based snacks as there is some evidence to suggest that some women benefit from maintaining constant glucose levels before their period starts. You should consider treating your migraines with medication whilst you see if your PMS can be better managed.

## **Useful contacts**

- **Women's Health Concern**, 4-6 Eton Place, Marlow, SL7 2QA.  
Website: [www.womens-health-concern.org](http://www.womens-health-concern.org)