Why do painful periods occur?

Painful periods can affect women at all ages during their reproductive life. Periods usually tend to become less painful as one gets older and often after childbirth.

Women usually start their periods around ages 12-13 (8-16 years) and reach menopause when periods stop as ovaries run out of eggs around age 51 (48-55 years). This means that if women have 0-1-2 children, a woman would expect to have at least 350-400 periods in her lifetime. Previously, women had just a handful of periods as they gave birth to several children (10-12) and breast fed for long periods, if they were fortunate not to die during childbirth, which used to be very risky business.

Dysmenorrhoea

Dysmenorrhoea is the medical term for painful periods. This may be further classified as Primary or Secondary Dysmenorrhoea.

Primary Dysmenorrhoea

Is used to describe painful periods that usually do not have an underlying cause. It occurs in three quarters of young girls and women at some point in their life, often making them miss school or work.

It is characterised by the pain starting the day before or during the first day of bleeding and usually settles by 2-3 days into the period.

Cause of Pain

During the periods, the uterus (womb) releases chemicals known as prostaglandins, which in turn cause spasms of the muscle wall of the womb, reducing blood flow and oxygen to the uterus and thereby causing pain. These chemicals can also cause headaches, nausea, vomiting and diarrhoea in some women during their periods. Therefore, taking anti-prostaglandins such as Ibuprofen, Mefenamic Acid and Neurofen taken regularly during the period can often help ease the pain when compared to Paracetamol as the latter is not an anti-prostaglandin medication.

Secondary Dysmenorrhoea

Is used to describe period pain and congestion that can start several days before the blood flow starts and may become slightly better once the bleeding starts. Women may not have had any significant pain with their periods previously.

Women with periods that have become painful over time often have underlying causes such as Endometriosis (see separate leaflet), Pelvic Congestion, Pelvic Inflammatory Disease (PID), Adenomyosis (where the lining of the womb pushes into the muscle layer of the womb, also known as uterine or internal endometriosis) and Fibroids (see separate leaflet). Many of these women may have heavy periods (see separate leaflet) as well as painful periods.

Management of Painful Periods

Lifestyle Advice:

Exercise: It has been shown that being active before and during periods reduces the intensity of period pains. Walking, running, swimming, yoga, Pilates, team sports or gym are all equally helpful. It is best advised to avoid handstands or headstands during periods to try and avoid retrograde (blood flowing backwards) menstruation, although the science is not strong.

Do exercises that you are used to and listen to your body as to how much you can stretch yourself. Make small increases with each period but build up when you are not having your period.

Exercise increases endorphins which may be helpful in relieving pain and by increasing blood supply to the uterus, removing the pain causing prostaglandins.

Heat: Using a heat pad or a hot water bottle often helps easing the pain, especially when used in combination with NSAIDs (see below). Care must be taken to ensure that the heat applied is not too high to avoid burns to the skin.

Heat helps in relaxing the uterine muscles and by dilating the blood vessels to the uterus (vasodilatation), it helps to wash away the pain inducing prostaglandin chemicals.

Cold packs may help some women more than heat treatment.

Diet: A healthy fibre rich, nutrient dense, antioxidant rich plant based diet rich in fruit, vegetables, beans, and whole grains along with nuts and seeds and herbs and spices will help with reducing period pains. Adopt a predominantly Whole Food Plant Based way of eating.

Check that your Vitamin D levels are normal otherwise you may need a regular Vit D3 supplement (1000-2000 IU/day) especially in the winter months if not able to avail the benefits of Vitamin D producing sunshine. Vitamin D helps with the absorption of calcium, the lack of which can increase menstrual cramps. There is no indication or benefit to taking calcium supplements. Instead eat foods that are naturally rich in calcium such as sesame seeds, figs, beans, almonds and green leafy vegetables

Complementary Therapies: Acupuncture, acupressure and yoga also have shown to be helpful in reducing painful periods.

Stress and Sleep: Identifying stress triggers and addressing them can help in pain reduction. It is also important to ensure a good quality sleep of 7-9 hours especially during periods as feeling rested will allow a woman to feel better equipped to deal with tiredness that may accompany a period. Camomile tea can help with this and to ease muscle spasms.

Risky Substances: Alcohol, smoking and drugs can all worsen menstrual period symptoms through a variety of mechanisms. It is always best to avoid these risky substances in general.

Medical Management

NSAIDS: If not allergic to them, anti-prostaglandins medications (Non-Steroidal Anti-Inflammatory Drugs (NSAIDS) like Ibuprofen or Neurofen, taken two – three times a day after meals (to avoid gastritis) in the appropriate dose (usually 200mg – 400mg) can be very helpful.

It is recommended to start the day before the period starts or as soon as bleeding starts to counteract the prostaglandin chemicals released by the womb. These medications are very effective in most cases with primary and some cases with secondary dysmenorrhoea. The mistake often made by women is waiting to take the medicines once pain has already started. In this situation, the drugs take longer to counteract the prostaglandins already released by the womb.

Hormones: If a woman is not trying for a pregnancy, using birth control pills (COCP for example should be taken back to back without a break as there is no medical indication to have a monthly withdrawal bleed on the combined pill) or hormonal injections and implants including the progesterone releasing intrauterine system (Mirena IUS) may be a very effective way in reducing both heavy and painful periods by thinning the lining of the womb. The oral contraceptive pill can be safely taken back to back (with breaks every few cycles if wished) in many women.

Surgical options: are not helpful in primary dysmenorrhoea. In women with endometriosis, options such as laparoscopic treatment (keyhole surgery) may be beneficial in helping with period pains. Removal of fibroids can be helpful in some women. Hysterectomy may be indicated in some women after all conservative options have been considered in women with adenomyosis, fibroids or endometriosis. In each of these situations, individualised management is crucial with the guidance of a specialist.

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Updated January 2020