

# Medical A to Z

## Dysmenorrhoea

Dysmenorrhoea is the pain and discomfort experienced during, or just before, a menstrual period.<sup>1-3</sup>

### Causes

Primary dysmenorrhoea is period pain considered a normal part of the menstrual cycle, and it is common in young women.<sup>1-3</sup> During a period, the muscular wall of the womb contracts to encourage the lining to shed away, compressing the blood vessels that line the womb and temporarily cutting off its blood supply.<sup>1,3</sup> Consequently, without oxygen, the tissues in the womb release pain-triggering chemicals, along with prostaglandins that promote further contractions, which worsen the pain.<sup>1,2</sup> It is unknown why some women experience more severe dysmenorrhoea than others, but it may be due to excessive production of prostaglandins causing stronger contractions.<sup>1,2</sup>

Occasionally, period pain can be a symptom of an underlying medical condition, which is known as secondary dysmenorrhoea.<sup>1,3</sup> Potential conditions may include endometriosis, where the same type of cells that line the womb grow outside the womb, such as on the fallopian tubes and ovaries and inside the pelvis, causing pain when they shed into the abdominal cavity with a period.<sup>1,2</sup> Adenomyosis can cause painful periods due to the same type of cells that line the womb starting to grow within its muscular wall.<sup>1</sup>

### Symptoms

Dysmenorrhoea is experienced as painful muscle cramps in the lower abdomen, ranging from intense spasms to a dull, constant ache.<sup>1,2</sup> Dysmenorrhoea can vary from mild discomfort to severe pain, with one fifth of women complaining that the



pain prevents everyday activities.<sup>1,3</sup>

Although the pain is usually localised to the lower abdominal area, it can also affect the lower back and thighs.<sup>1,3</sup> The pain tends to begin on the first day of menstrual bleeding, although some experience symptoms in the days leading up to their period, and typically lasts between 12 and 24 hours, although this can increase up to several days in severe cases.<sup>1</sup> Other associated premenstrual symptoms include nausea,<sup>1,3</sup> vomiting,<sup>2</sup> headaches,<sup>1</sup> fatigue,<sup>1,3</sup> dizziness or faintness and diarrhoea.<sup>1</sup> The pain of primary dysmenorrhoea can lessen with age, particularly after having children.<sup>1,2</sup>

Secondary dysmenorrhoea is more common in women between the ages of 30 and 45 and may be associated with additional symptoms such as a change in the normal pattern of period pain (duration or severity), irregular periods, bleeding in between periods and pain during sex.<sup>1,3</sup>

### Orthodox treatment

Primary dysmenorrhoea can normally be treated with either over the counter or GP-prescribed non-steroidal anti-inflammatory drugs and other painkillers.<sup>1,3</sup> The combined oral contraceptive pill will prevent ovulation and can potentially help to relieve symptoms

by thinning the womb lining to reduce the contractions needed to shed away.<sup>1,3</sup>

Self-help measures may relieve the pain. They include gentle exercise,<sup>1</sup> applying heat to the abdomen, light massage, relaxation techniques such as yoga,<sup>1,3</sup> and a transcutaneous electronic nerve stimulation (TENS) machine that uses electrical impulses to stimulate nerve activity and block pain.<sup>1</sup>

For secondary dysmenorrhoea, treatment will be tailored for the underlying health condition, such as surgery or hormonal suppression for endometriosis.<sup>1,2</sup>

### Complementary therapies

Two studies that investigated the effect of massage in the treatment of primary dysmenorrhoea and endometriosis respectively suggested that massage had a positive therapeutic effect, particularly upon the intensity of menstrual pain.<sup>4-5</sup>

A randomised placebo-controlled clinical trial involving 67 college students suggested that aromatherapy using a topically applied blend of lavender (*Lavandula officinalis*), clary sage (*Salvia sclarea*), and rose (*Rosa centifolia*) is effective in decreasing the severity of menstrual cramps (see page 28).<sup>6</sup>

Another study involving 85 women in full-time employment suggested that abdominal meridian (Kyongrak) massage may be an effective therapeutic intervention for women suffering from menstrual cramps caused by dysmenorrhoea.<sup>7</sup>

A systematic review of more than 45 acupressure studies revealed strongest evidence for pain, particularly dysmenorrhoea, lower back and labour, post-operative nausea and vomiting.<sup>8</sup>

Another study suggested reflexology was superior to ibuprofen administration on reducing the intensity and duration of menstrual pain in female students with primary dysmenorrhoea.<sup>9</sup>

### With thanks to

The National Association for Premenstrual Syndrome ([www.pms.org.uk](http://www.pms.org.uk)) who provided information and advice.

### References and further reading

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- 8 Robinson N (2011). The evidence for shiatsu: a systematic review of shiatsu and acupressure, *BMC Complementary*

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- 9 Valiani M et al (2010). Comparing the effects of reflexology methods and ibuprofen administration on dysmenorrhea in female students of Isfahan University of Medical Sciences, *Iranian Journal of Nursing and Midwifery Research* 15(1): 371-378. Source: PubMed ([www.ncbi.nlm.nih.gov/pubmed/22069413](http://www.ncbi.nlm.nih.gov/pubmed/22069413)).

**NB:** The information provided in this article is not all encompassing and intended as an overview only. It should not be used for the purposes of diagnosis. Members or clients presenting with any symptoms should always consult a GP or other relevant health practitioner. The advice of a doctor, pharmacist or other suitably qualified person should be sought before taking any form of medication or treatment.