

## **Dysmenorrhoea (Period pain)**

### **Why dysmenorrhoea is a problem**

Dysmenorrhoea is medical term for painful menstrual cramp of uterine origin just before the menstrual begin and usually subsided one or two days after. Most of the time it is physiological but it is often associated with endometriosis and other uterine pathology. Studies have shown the prevalence of dysmenorrhoea in female population vary from 45%-95%. It is indeed the most common gynaecological condition in women regardless of age and race and nationality.

Dysmenorrhoea affects productivity due to common absenteeism from work and school. Studies have shown almost 13% to 51% of women have been absent from work and school at least once and 5% to 14% are often absent owing to the severity of symptoms. Yet despite this substantial effect on their quality of life and general wellbeing, few women with dysmenorrhoea seek treatment as many believe it would not help

### **What types of dysmenorrhoea are there?**

There are two type of dysmenorrhoea based on what the underlying cause is. Primary dysmenorrhoea is menstrual pain without a pelvic disease, and secondary dysmenorrhoea is menstrual pain due to identifiable disease. In primary dysmenorrhoea, menstrual cramp normally begins 6 to 12 months from the onset of the menarche (the first period) and occurs for 8 to 12 hours at the onset of menstrual flow. It is commonly accompanying by other symptoms like back and thigh pain, headache, diarrhoea, nausea, and vomiting. Primary dysmenorrhoea is common among the teenagers and young woman and one of the most common reasons for school absenteeism. Primary dysmenorrhoea often improves as a woman grow older and after childbirth.

Secondary dysmenorrhoea usually arises later when a woman is in her 30s or 40s, after the onset of an underlying pelvic disease. Other gynaecological symptoms, such as pain during intercourse, heavy menstruation, intermenstrual bleeding, and postcoital bleeding, may also be present depending on the underlying condition. Common causes of secondary dysmenorrhoea include endometriosis, fibroids (myomas), adenomyosis, endometrial polyps, pelvic inflammatory disease, and the use of an intrauterine contraceptive device. Secondary dysmenorrhoea often gets worse with time and the pain may become more severe in it intensity and duration and it may severely affect productivity and quality of life if not treated.

### **How would your gynae doctor investigate dysmenorrhoea?**

Firstly, your gynae doctor would get a detail history of your menstruation and performed a physical examination. Information about the onset, location, duration, and

characteristics of pain, plus any aggravating or relieving factors, would be sought. The doctor would perform an Ultrasound of the pelvis to look for evidence of underlying disease like endometriosis, uterine fibroid or polyp that may cause the menstrual pain.

### **Treatment and remedies for dysmenorrhoea**

The aim of treatment of dysmenorrhoea is to relieve pain and treating the underlying cause. The treatment modalities can be divided into two i.e non-hormonal drugs and hormonal drugs.

***Simple analgesics (pain killer)*** - Simple analgesics like paracetamol and aspirin may be useful for mild to moderate menstrual pain

***Non steroidal antiinflammatory drugs (NSAIDs)*** – is a good pain relief. Between 17% and 95% of women achieve pain relief with an NSAID for moderate pain over three to five days. However gastrointestinal effects (nausea, vomiting, and/or diarrhoea) are of particular concern with NSAIDs.

***Oral contraceptives (OC)*** – there are some evidences that showed oral contraceptives pills relieve dysmenorrhoea significantly especially those with secondary dysmenorrhoea. OC also reported to reduce menstrual blood loss. If a woman also wants to avoid pregnancy, then a combined oral contraceptive may well be a worthwhile treatment option. Adverse effects such as headache, nausea, abdominal pain, bloating, anxiety, loneliness, weight gain, and acne have all been reported in association with combined oral contraceptives.

***Levonorgestrel Releasing Intra-Uterine System (MIRENA)*** – MIRENA is an intrauterine device containing levonorgestrel hormone. It releases the hormone into the uterine cavity for at least five years, thus preventing the thickening of the lining of the uterus. It has been shown to be effective in reducing dysmenorrhoea in women with endometriosis.

### **Alternative therapies**

In all, 10-20% of women with primary dysmenorrhoea do not respond to treatment with NSAIDs or oral contraceptives. In addition, some women have contraindications to these treatments. Consequently, researchers have investigated many alternatives to drug treatments.

***Herbal products or medicines, and dietary supplements*** - Herbal and dietary therapies are popular as they can be self administered and are available from health shops, chemists, and supermarkets. This availability, although helpful, can create problems with the

control of dosage, quality, and drug interactions. Studies have shown that thiamine, pyridoxine, magnesium, and fish oil may be effective in relieving pain, although some of these may be associated with adverse effects. Vitamin E was also shown in some study to be effective in treating dysmenorrhoea, but it advises caution in use owing to potential adverse effects when used in high doses.

**Exercise** - Physical exercise may reduce dysmenorrhoea. It is postulated that exercise works by improving blood flow at the pelvic level as well as stimulating the release of  $\beta$  endorphins, which act as non-specific analgesics.

### *Summary points*

*Dysmenorrhoea is a common gynaecological condition that is underdiagnosed and undertreated*

*Simple analgesics and non-steroidal anti-inflammatories are effective in up to 70% of women*

*Oral contraceptives can be considered for women who wish to avoid pregnancy*

*For women seeking alternative therapies heat, thiamine, magnesium, and vitamin E may be effective*