The Women's Natural Health Clinic

Painful Menstrual Periods

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Overview

Dysmenorrhoea, or painful menstruation is the most common complaint of gynaecologic patients. Many women experience mild discomfort during menstruation, but the term "dysmenorrhoea" applies to those women whose pain prevents normal activities and requires medication. There are three types of dysmenorrhoea. Primary dysmenorrhoea, cramping pain occurring during ovulatory cycles where no organic cause is present. Pathogenesis is uncertain and uterine hyperactivity, prostaglandins, leukotrienes and vasopressin have all been implicated. Secondary dysmenorrhoea, where pathological causes can be identified. Membranous dysmenorrhoea, where the lining of the endometrial cavity is shed in one piece.

Primary dysmenorrhoea usually starts at (or soon after) menarche and possibly affects more than 50 per cent of women. In about five to 15 per cent of the women affected, it is severe enough to significantly interfere with everyday activities and may result in absence from school or work . Women who experience primary dysmenorrhoea suffer sharp, intermittent spasmodic type of pain, usually centred in the lower abdomen directly above the superior border of the pubic symphysis. The pain may additionally radiate distally along the back of the legs or be referred to the lower back at the level of L3/4 vertebrae. This pain is commonly accompanied with systemic symptoms of nausea, vomiting, diarrhoea, fatigue, fever, headache, light-headedness and in some cases even fainting.

Dysmenorrhoea in Conventional Medicine

Dysmenorrhoea in conventional medicine is described as pain during menstruation. Pain is regarded as having two components, a continuous lower abdominal pain, which radiates through to the back and sometimes down the thighs; and an intermittent cramping pain. The aetiology of primary dysmenorrhoea is still not fully understood, but most symptoms are explained by the action of prostaglandins (naturally occurring unsaturated fatty acids) especially prostaglandin two alpha (PGF2-alpha) on endometrial tissue. Compelling evidence now exists for the link between dysmenorrhoea and prostaglandins. The immediate cause of pain has been traced to myometrial contractions, and women with severe dysmenorrhoea have experienced cramps of even greater severity than those experienced by women at the height of labour.

It is well known that the disintegrating endometrial cells release PGF2-alpha as menstruation begins. This prostaglandin stimulates myometrial contractions, ischemia, and sensitisation of nerve endings. The increased myometrial activity reduces uterine blood flow particularly during intense contractions.

Women who have more severe dysmenorrhoea have higher levels of PGF2-alpha in their menstrual fluid attaining the maximum level during the first two days of menses when symptoms of dysmenorrhoea are most severe.
Some studies have also suggested increased levels of leukotrienes and vasopression, but these connections are not yet well established. Women with severe dysmenorrhoea have increased levels of those leukotrienes, which increase uterine muscle spasm (C4 and D4). Vasopressin is a hormone produced by the posterior pituitary gland that causes narrowing of the uterine arteries and raises blood pressure causing increased pelvic discomfort during menses.

Although it is not known why dysmenorrhoeal women have higher levels of prostaglandin's, many hypotheses have been proposed; increased prostaglandin production, excess or abnormal release of prostaglandin, and hypersensitivity to prostaglandin's. Others have even hypothesised that high levels of prostaglandin many be the result of, rather than the cause, of increased contractions since prostaglandin is often released in response to the stretching of muscle (Gannon,1989). In this case the contractions are brought on by an obstruction of the cervix, either because of a narrow cervical os or because of large endometrial fragments that need to be expelled. Prostaglandins are thus released because of the contractions. However, the question of the mechanism that triggers the contraction is currently left unanswered.

The first line treatment protocol for dysmenorrhoea is aimed at inhibiting prostaglandin synthesis levels and reducing uterine contractility through nonsteroidal anti-inflammatory drugs (NSAIDs). All NSAIDs are thought to be effective, relieving pain by up to 70%. A recent systematic review showed that ibuprofen, naproxen, mefenamic acid, celecoxib and rofecoxib are all effective at relieving pain. Naproxen and ibuprofen appeared to be superior in terms of need for rescue analgesia; ibuprofen was better tolerated (Zhang and Li Wan Po, 1998; Bandolier, 1998). Treatment may be started at the onset of pain or pre-menstrually in preparation for expected menstrual pain. Most trials have studied the use of NSAIDs at the onset of pain. One small study compared treatment started pre-menstrually against treatment from onset of pain - both strategies were equally effective. Continuous low-level topical heat therapy is proving as effective as ibuprofen for the treatment of dysmenorrhoea, according to researchers who recently conducted the first randomized, controlled clinical trial of such therapy.

Conventional Medicine Treatment

The treatment for moderate to severe cases involves prostaglandin inhibitors such as naproxen, mefenamic acid and most commonly Ibuprofen as this is an over the counter medication. NSAIDs are started at the onset of menstrual pain and continued a regular schedule instead of an as-needed basis. Contraindications to NSAIDs include allergy to aspirin or other NSAIDs, gastrointestinal disease, and bleeding disorders. Most patients with primary dysmenorrhoea show considerable improvement with NSAID treatment with reports indicating successful pain relief between 64 and 100 percent of patients. NSAID treatment depends of the severity of symptoms.

Aspirin, acetaminophen and ibuprofen are usually recommended for mild symptoms together with local heat application to the lower back or abdomen, which improves blood circulation to the muscles, which in turn relaxes muscle contractions and reduces discomfort.

The treatment protocol for more severe cases is to prescribe a combined oral contraceptive pill (COC). Once a woman is taking a COC her menstrual fluid will be reduced in volume and in most cycles, ovulation is suppressed completely. For patients who also require contraception the COC is a very convenient treatment protocol and will relieve dysmenorrhoea in up to 80-90% of cases. They work by inducing endometrial thinning and inhibition of ovulation, resulting in low levels of uterine prostaglandins.

Combined oral contraceptive pills contain synthetic hormones that are very close in molecular structure to the natural estrogen and progesterone produced by the ovaries. However the systemic levels of these hormones whilst taking COC's is higher than naturally occurring levels. The levels also do not change during the cycle only dropping during the "non-pill" or placebo week to allow a thin shedding of the endometrium termed "withdrawal bleeding". This reduces the stimulation of endometrial tissue and prevents the release of high concentrations of uterine prostaglandins, thereby significantly reducing menstrual pain.

Menstrual cycle suppressants such as progestogens, danazol, and gonadotrophin releasing hormone analogues are the last line of chemical pharmaceutical treatment and are occasionally used for resistant dysmenorrhoea, but usually only after referral to a gynaecologist.

Natural Medicine Treatment

Many different modalities of natural medicine treatment exist for dysmenorrhoea. We primarily use Chinese Medicine (CM) as we find this most effective. CM theory identifies dysmenorrhoea as a pathological condition of the Liver, the Penetrating Vessel (Chong Mai) and the Directing Vessel (Ren Mai). Together with blood and Qi, these are responsible for the physiology of menstruation. For the normal menstrual cycle to occur, blood must be in abundant volume and move freely and with sufficient force. This free movement relies on freely flowing Liver Qi and Qi within the Penetrating Vessel. Disorder in the functioning of the liver is the common underlying causal factor in menstrual disorders and dysmenorrhoea is no exception, but it is the result of a multiplicity of factors of which psychosocial ones are significant. Many women do not to talk about personal problems and keep them inside. This causes Liver Qi stagnation which can transform into heat and cause blood stagnation and other related pathological conditions which in turn result in various gynaecological conditions including dysmenorrhoea.

Two major categories of dysmenorrhoea exist in Chinese Medicine, the full (or shi) type and the empty (or xu) type. The most common type is the excess type, which is characterised by severe lower abdominal pre-menstrual pain, usually for1-2 days immediately before the onset of bleeding.

The pain is usually (but not always) relieved once menstrual flow starts. Full dysmenorrhoea is differentiated into two types:

(1) Qi and Blood Stagnation caused by Liver Qi Stagnation. Signs and symptoms include painful distension and fullness of the abdomen and breasts, constipation or painful straining during bowel movement or in urination, emotional disturbances, lower abdomen sensitive to pressure, dark, clotted menstrual flow, yellow urine. Pain is usually relieved after onset of menses and passing clots. The treatment principal in this pattern is to soothe the Liver and promote the free flow Qi and to invigorate blood, thereby eliminating stasis and stopping pain

(2) Blood Stagnation caused by Cold and Damp in the Uterus. Signs and symptoms include feeling of cold, spasmodic lower abdominal pain that is relieved by the application of heat and pressure, frequent clear urination. The treatment principle is to warm the uterus, expel cold and strengthen the Spleen to resolve damp, thereby relieving the pain by warming the channels and dispelling cold and resolving damp.

Our Female Healthcare Philosophy

At the Women's Natural Health Clinic, we specialise in providing comprehensive natural reproductive, gynaecological, obstetric and general healthcare for females from adolescence to post-menopause. Our approach is to integrate techniques in both oriental and western medical diagnosis to formulate a naturally oriented treatment plan combining acupuncture, herbal medicine, naturopathic medicine, nutritional therapy, exercise and lifestyle. Each treatment plan is tailored specifically to each individual woman maximizing results.

Please email us at enquiries@naturalgynae.com with questions, we are more than happy to provide any information via email that will assist you in deciding which treatment approach would be best for you

For more information, contact details and appointments click here www.naturalgynae.com

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