International Journal of Multidisciplinary Research and Development

IJMRD 2014; 1(2): 172-173
www.allsubjectjournal.com
Received: 15-05-2014
Accepted: 28-06-2014
e-ISSN: 2349-4182
p-ISSN: 2349-5979

K Radhika
Vice Principal, Columbia College Of Nursing, Bangalore

Correspondence
K Radhika
Vice Principal, Columbia College Of Nursing, Bangalore.

Dysmenorrhea

K Radhika

Abstract
Dysmenorrhoea is estimated to occur in 20% to 90% of women of reproductive age. It is the most common menstrual disorder. Typically it starts within a year of the first menstrual period. When there is no underlying cause often the pain improves with age or following having a child. Symptoms often co-occurring with menstrual pain include nausea and vomiting, diarrhea or constipation, headache, dizziness, disorientation, hypersensitivity to sound, light, smell and touch, fainting, and fatigue. Non-steroidal anti-inflammatory drugs are effective in relieving the pain of primary dysmenorrhoea.

Keywords: Dysmenorrhea, menstrual disorder, women reproductive age

Introduction
Dysmenorrhoea also known as painful periods or menstrual cramps, is pain during menstruation. It usually begins around the time that menstruation begins. Symptoms typically last less than three days. The pain is usually in the pelvis or lower abdomen. Other symptoms may include back pain, diarrhoea, or nausea.
In young women painful periods often occur without an underlying problem. In older women it is more often due to underlying issues such as uterine fibroids, adenomyosis, or endometriosis. It is more common among those with heavy periods, irregular periods, whose periods started before twelve years of age, or who have a low body weight. A pelvic exam in those who are sexually active and ultrasound may be useful to help in diagnosis. Conditions that should be ruled out include ectopic pregnancy, pelvic inflammatory disease, interstitial cystitis, and chronic pelvic pain. Dysmenorrhoea occurs less often in those who exercise regularly and those who have children early in life. Treatment may include the use of a heating pad.[1]Medications that may help include NSAIDs such as ibuprofen, hormonal birth control, and the IUD with progestogen. Taking vitamin B or magnesium may help. Evidence for yoga, acupuncture, and massage is insufficient. Surgery may be useful if certain underlying problems are present.
Dysmenorrhoea is estimated to occur in 20% to 90% of women of reproductive age. It is the most common menstrual disorder. Typically it starts within a year of the first menstrual period. When there is no underlying cause often the pain improves with age or following having a child.

Signs and symptoms
The main symptom of dysmenorrhoea is pain concentrated in the lower abdomen or pelvis. It is also commonly felt in the right or left side of the abdomen. It may radiate to the thighs and lower back. Symptoms often co-occurring with menstrual pain include nausea and vomiting, diarrhea or constipation, headache, dizziness, disorientation, hypersensitivity to sound, light, smell and touch, fainting, and fatigue. Symptoms of dysmenorrhoea often begin immediately following ovulation and can last until the end of menstruation. This is because dysmenorrhoea is often associated with changes in hormonal levels in the body that occur with ovulation. The use of certain types of birth control pills can prevent the symptoms of dysmenorrhoea, because they stop ovulation from occurring.

Causes
Dysmenorrhoea can be classified as either primary or secondary based on the absence or presence of an underlying cause. Secondary dysmenorrhoea is dysmenorrhoea which is associated with an existing condition.
The most common cause of secondary dysmenorrhoea is endometriosis, which can be visually confirmed by laparoscopy in approximately 70% of adolescents with dysmenorrhoea.
Other causes of secondary dysmenorrhoea include leiomyoma, adenomyosis, ovarian cysts, and pelvic congestion.
Unequal leg length might hypothetically be one of the contributors, as it may contribute to a tilted pelvis, which may cause lower back pain, which in turn may be mistaken for menstrual pain, as women with lower back pain experience increased pain during their periods.

Other skeletal abnormalities, such as scoliosis (sometimes caused by spina bifida) might be possible contributors as well.

Mechanism

During a woman's menstrual cycle, the endometrium thickens in preparation for potential pregnancy. After ovulation, if the ovum is not fertilized and there is no pregnancy, the built-up uterine tissue is not needed and thus shed.

Molecular compounds called prostaglandins are released during menstruation, due to the destruction of the endometrial cells, and the resultant release of their contents. Release of prostaglandins and other inflammatory mediators in the uterus cause the uterus to contract. These substances are thought to be a major factor in primary dysmenorrhoea. When the uterine muscles contract, they constrict the blood supply to the tissue of the endometrium, which, in turn, breaks down and dies. These uterine contractions continue as they squeeze the old, dead endometrial tissue through the cervix and out of the body through the vagina. These contractions, and the resulting temporary oxygen deprivation to nearby tissues, are responsible for the pain or "cramps" experienced during menstruation.

Compared with other women, women with primary dysmenorrhoea have increased activity of the uterine muscle with increased contractility and increased frequency of contractions.

In one research study using MRI, visible features of the uterus were compared in dysmenorrheic and eumenorrheic (normal) participants. The study concluded that in dysmenorrheic patients, visible features on cycle days 1-3 correlated with the degree of pain, and differed significantly from the control group.

Diagnosis

The diagnosis of dysmenorrhoea is usually made simply on a medical history of menstrual pain that interferes with daily activities. However, there is no universally accepted gold standard technique for quantifying the severity of menstrual pains. Yet, there are quantification models, called menstrual symptomatics that can be used to estimate the severity of menstrual pains as well as correlate them with pain in other parts of the body, menstrual bleeding and degree of interference with daily activities

Once a diagnosis of dysmenorrhoea is made, further work-up is required to search for any secondary underlying cause of it, in order to be able to treat it specifically and to avoid aggravation of a perhaps serious underlying cause.

Further work-up includes a specific medical history of symptoms and menstrual cycles and a pelvic exam. Based on results from these, additional exams and tests may be motivated, such as:

- Laboratory tests
- Gynaecologic ultrasonography
- Laparoscopy may be required.

Management

Non-steroidal anti-inflammatory drugs (NSAIDs) are effective in relieving the pain of primary dysmenorrhoea. They can have side effects of nausea, dyspepsia, peptic ulcer, and diarrhea. Although use of hormonal birth control can improve or relieve symptoms of primary dysmenorrhoea, Norplant and Depo-provera are also effective, since these methods often induce amenorrhea. The intrauterine system (Mirena IUD) may be useful in reducing symptoms. A review indicated the effectiveness of transdermal nitroglycerin. There is poor evidence for treatments other than medications. One review found thiamine and vitamin E to be likely effective. It found the effects of fish oil and vitamin B12 to be unknown. Another review found that Vitamin B1 to be effective. Magnesium supplementation are a promising possible treatment. And insufficient evidence to recommend any other herbal or dietary supplement, includingomega-3 fatty acids, vitamin E, vitamin B6 among others which have been studied.

References

1. D.C Dutta's Text Book of Gynaecology including contraception. 2008, 171-177.
2. Annamma Jacob A Comprehensive Text Book of Midwifery, 2009.
3. Neelam Kumari. Shivani Sharma and Dr. Preeti Gupta. A Text Book of Midwifery and Gynecological Nursing
4. http://www. Wikipedia/ dysmenorrhea/ internet.com