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Menstrual Mysteries: A Mini Review on Dysmenorrhoea

Mini Review

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Abstract

Dysmenorrhea is a common symptom in reproductive age group females. Due to its wide variety of physical and psychological symptoms, it not only affects quality of life but also negatively affects work performance. Treatment of primary dysmenorrhea is empirical with NSAIDs and hormonal therapy, whereas treatment of secondary dysmenorrhea is based on Etiology.

Introduction

Dysmenorrhea, defined as painful menses, is considered one of the most common gynecological symptoms among females of childbearing age seeking medical advice [1]. Dysmenorrhoea is classified as primary or secondary based on pathophysiology and other associated symptoms. Primary dysmenorrhea begins shortly before or at the onset of menses in the absence of any pelvic pathology and is usually associated with various physical and psychological symptoms [2]. Primary dysmenorrheic pain has a cyclic pattern, typically severe during the first day of menses and usually lasts for 2-3 days [2,3].

Secondary dysmenorrhea is characterized by pain not necessarily occurring during menses and is usually common in females with no history of it [4]. It is secondary to some other pelvic pathology as endometriosis, adenomyosis, pelvic inflammatory disease, endometrial polyps, ovarian cysts, and congenital anomalies [5]. In secondary dysmenorrhea, pain is usually associated with abnormal menstrual bleeding, dyspareunia, infertility, or failed response to conventional drug therapy [6].

Pathophysiology

Increased secretion of prostaglandin F2α (PGF2α) and prostaglandin E2 (PGE2) in the uterus during endometrial shedding is the basic pathophysiology of dysmenorrhea. Elevated level of prostaglandins leads to myometrial contractions and vasoconstriction, resulting in uterine ischemia and production of anaerobic metabolites, which causes pelvic pain [7].

Management

The aim of treatment in Primary Dysmenorrhoea is to provide adequate pain relief. Both Pharmacological as well as non-pharmacological therapies are potential treatment options for managing primary dysmenorrhea [8]. The first-line therapies are Nonsteroidal anti-inflammatory drugs and hormonal contraceptives [6].

Nonsteroidal Anti-Inflammatory Drugs

NSAIDs are the most commonly used drugs for managing primary dysmenorrhea as they inhibit cyclooxygenase, which is responsible

for prostaglandin synthesis [5]. Usually recommended as the first-line therapy in young girls or females who are not willing to contraception [6]. Paracetamol is another treatment option for females who cannot tolerate NSAIDs and are not willing to contraception.

Hormonal Contraceptives

Hormonal contraceptives are also considered as first-line therapy for the management of dysmenorrhea, especially if willing for contraception or females who are either not benefit from NSAIDs or unable to tolerate side effects [6].

Non-Pharmacological Measures

The use of heating pads, acupuncture, acupressure, regular physical exercise, and yoga are encouraged because of their proven efficacy and low cost. Transcutaneous electrical nerve stimulation (TENS) is a non-invasive newer treatment modality used for refractory dysmenorrhea cases.

Surgical Interventions

Surgical interventions such as laparoscopic uterosacral nerve ablation (LUNA), presacral neurectomy (PSN), and hysterectomy are reserved for patients with severe dysmenorrhea who do not respond to conventional treatment modalities. For secondary dysmenorrhea, treat the etiology as antibiotics for pelvic inflammatory diseases, hysteroscopic polypectomy, correction of uterine anomaly, and medical or surgical treatment of endometriosis.

The response to treatment should be followed. Females with no or inadequately clinical improvement after 6 months of treatment should be assessed for compliance. Further gynecological evaluation in the form of either magnetic resonance imaging or diagnostic laparoscopy is recommended if symptoms persist despite of compliance.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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