STRAUSS NATURALS

Dr. Michael Garko, Ph.D.

DYSMENORRHEA –LIFE ALTERING MENSTRUAL CRAMPING AND PAIN

Impact of Dysmenorrhea on Women's Health and Quality of Life

Dysmenorrhea creates havoc in women's lives. Recurring ramping menstrual pain associated is the hallmark and most common reported symptom of dysmenorrhea.

Not to be misled, the pain associated with dysmenorrhea does not need to be severe in order for it to impose deleterious health effects and quality of life consequences. Even moderate recurring pain can have a significant impact on the biological, behavioral, psycho-emotional and social dimensions of women's lives, impairing their ability to navigate successfully through the life course.[1]

Dysmenorrhea is a debilitating gynecologic condition that has emerged as the leading cause of gynecological morbidity (i.e., any reproductive system-related condition, disease or dysfunction that is not related to pregnancy, abortion, or childbirth)[2] in women of reproductive age, notwithstanding their age, nationality or economic status.[3] In a real sense, dysmenorrhea has the pathophysiological potential to undermine women's health, and wellness, interpersonal relationships, psychological and physical well-being, careers and educational pursuits, all of which contributes to poor quality of life.[1]

Primary and Secondary Dysmenorrhea

Dysmenorrhea is categorized as either primary or secondary. Distinguishing between the two types is important because it bears upon the definition, prevalence, clinical features, pathophysiology and treatment of dysmenorrhea.

Primary Dysmenorrhea

Definition. There is a fair amount of definitional confusion surrounding primary dysmenorrhea due in large measure to the absence of standardized criteria to clinically define what it is.[4] That said, there does seem to be some overall agreement that primary dysmenorrhea is uterine-implicated recurring cramping pain in the lower abdomen experienced before and during menses and not attributable to any other disease or pelvic condition.[1,3,5]

Prevalence. There has been considerable variability in the reporting on the prevalence of dysmenorrhea. In fact, the prevalence of dysmenorrhea has been underestimated, much to the detriment of women. Its prevalence has remained elusive due to few women seeking medical treatment for one reason or another (e.g., embarrassment, lack of understanding what dysmenorrhea is, belief that pain is a normal part of menstruation), different definitions and a lack of standardized criteria and methods to define it and asses its varying degrees of severity. Nevertheless, in a well-done comprehensive review of longitudinal, case-control or cross-sectional studies with large community-based samples so as to achieve an accurate understanding of its prevalence, it was found that the prevalence of dysmenorrhea varied between 16% and 91% in women of reproductive age, with 2%-29% of the women in the study, suffering from severe pain.[2]

Signs & Symptoms.

Primary dysmenorrhea is characterized by the following signs and symptoms:

- Onset beginning not long after menarche (≤6 months)
- Cramping pain, which usually begins several hours before or just after menstrual flow
- Pain most severe on the first and second day of menstrual cycle
- Pain typically lasts from 48-72 hours
- Background of constant lower abdominal pain. Often accompanied by nausea, vomiting, diarrhea, migraines, dizziness, fatigue, insomnia and in rare instances a temporary loss of consciousness attributable to a fall in blood pressure (syncope) and abnormally high body temperature (hyperthermia).
- Clinical symptoms reproducible from one menstrual cycle to the next.
- Poor sleep quality; Poor mood ; Reduced physical activity[1,3,5,6,7]

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Pathophysiology.

Currently, the prostaglandin theory is the most widely accepted, prevailing explanation as to the cause of primary dysmenorrhea. Prostaglandins are an eicosanoid-related family of hormone-like, lipid-mediating compounds (i.e., prostaglandin E2/PGE_2), PGI_2/prostacyclin) prostaglandin D2/PGD_2, prostaglandin F2a/PGF_2a and thromboxane A2/TXA_2) produced enzymatically from the fatty acid arachidonic acid by way of the cyclooxygenase (COX) pathway.[8,9]

- Prostaglandins serve vital biological functions and are involved in a wide range of physiological processes (e.g., contraction and relaxation of smooth muscle, dilation and constriction of blood vessels, regulation of blood pressure, regulation of pro-inflammatory and anti-inflammatory responses, coagulation, body temperature and sleep regulation) in virtually all of the cells and tissues of the major organ systems of the body, including the reproductive system, generally, and the menstrual cycle, specifically.[8]
- In terms of the menstrual cycle and dysmenorrhea, during the luteal phase of menses if there is no fertilization of the dominate ovum, the corpus luteum degenerates and ceases to produce estrogen and progesterone. The reduced production of estrogen and progesterone leads to the breakdown and sloughing off of the endometrium and signals menstruation to begin. At the same time, the stromal cells of the endometrium release prostaglandins. The prostaglandins facilitate the breakdown and sloughing off of the endometrium by constricting blood vessels which thereby decrease blood supply to the endometrium causing it to die. Prostaglandins also cause the muscles and blood vessels of the uterus to contract, which causes pain.[7]
- According to the prostaglandin theory, it is the overproduction and hypersecretion of intrauterine prostaglandins that results in hypercontractility of the myometrium (i.e., outer muscular layer of the uterus) resulting in uterine muscle ischemia (i.e., restriction of blood supply) and hypoxia (lack of sufficient oxygen to maintain normal physiological function) and, ultimately the hallmark symptom of dysmenorrhea, pain.[7]

Treatment.

When it comes to treating primary dysmenorrhea, the priority is to provide women with relief from menstrual pain so as to improve the status of their health, wellness and wellbeing, while seeking to improve the quality of their lives in terms of their personal and professional relationships, educational and career ambitions or any other aspect of their lives being undermined by the debilitating effects of primary dysmenorrhea such as absenteeism from school or work.

There are pharmacological and non-pharmacological complementary and alternative therapies in the treatment and management of primary dysmenorrhea.[8] Pharmacologically speaking, NSAIDs and hormonal contraceptives are employed as first-line clinical therapies in conventional/allopathic medicine primarily on the basis that they inhibit the production of pain-inducing prostaglandins. That said, the use of non-pharmacological therapies among women suffering from primary dysmenorrhea is not uncommon.[8] In fact, there is evidence to suggest that women might prefer alternative or complementary non-pharmacological interventions either independent of using NSAIDs or hormonal contraceptives or in combination with them, respectively.[10] Herbal/botanical remedies in the treatment and management of dysmenorrhea have been used with effectiveness in various cultures around the world.[11,12,13]

References available upon request.

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Impact of Dysmenorrhea on Women's Health and Quality of Life Secondary Dysmenorrhea

Secondary Dysmenorrhea

Definition. The overproduction and secretion of prostaglandins during the menstrual cycle can be involved in secondary dysmenorrhea. However, by definition the menstrual pain from secondary dysmenorrhea is associated with or otherwise originates from any number of pathological pelvic-related disorders such as endometriosis, fibroids, uterine polyps, adenomyosis, chronic pelvic inflammatory disease, congenital anatomic abnormalities or complications intrauterine contraceptive devices.[5,6,14]

Prevalence. The exact prevalence of secondary dysmenorrhea is difficult to determine because of all of the various pathological pelvic disorders that cause it.

Signs & Symptoms.

Secondary dysmenorrhea is characterized by the following signs and symptoms which are reported here verbatim from https://emedicine.medscape.com/article/253812-overview:

- Dysmenorrhea beginning in the 20s or 30s, after previous relatively painless periods
- Heavy menstrual flow or irregular bleeding
- Dysmenorrhea occurring during the first or second cycles after menarche
- Pelvic abnormality with physical examination
- Poor response to nonsteroidal anti-inflammatory drugs (NSAIDs) or oral contraceptives (OCs)
- Infertility; Dyspareunia; Vaginal discharge[7(pp.2-3)]

Pathophysiology

Various pathological conditions can be involved in the pathogenesis of secondary dysmenorrhea such as endometriosis, uterine fibroids, uterine polyps, ovarian cysts and tumors, adenomyosis, chronic pelvic inflammatory disease, congenital anatomic abnormalities, transverse vaginal septum, complications associated with intrauterine contraceptive devices.[5,6,14]

Treatment. As with primary dysmenorrhea the primary treatment goal is to provide symptomatic pain relief but additionally to inhibit the underlying disease or condition that may be causing the menstrual-related pain. The use of nonsteroidal anti-inflammatory drugs (NSAIDs) is the recommended therapy in conventional medicine to moderate menstrual pain. The non-pharmacological use of herbal/botanical remedies have been found to make an important contribution in the treatment and management of secondary dysmenorrhea.[11,12,13]

Summary

- Dysmenorrhea – underestimated, underreported highly prevalent gynecological condition of painful menstrual cramps and leading cause of gynecological morbidity
- Debilitating cramping pain - hallmark of dysmenorrhea
- Primary dysmenorrhea – recurring painful cramping in lower abdomen during menstruation with no pelvic-related disease or condition
- Secondary dysmenorrhea – recurring painful cramping in lower abdomen during menstruation with pelvic abnormality such as endometriosis
- Prostaglandins – overproduction and hypersecretion cause of menstrual cramping
- NSAIDs and hormonal contraceptives used in conventional medicine to treat menstrual pain
- Herbal/botanical remedies are often preferred as a non-pharmacological alternative and shown to be effective in the treatment and management of dysmenorrhea.

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The health and quality of life consequences associated with dysmenorrhea serves as a reminder of the complexity of the female reproductive system, while underscoring the importance of maintaining its structure and function throughout the life course.

With this in mind, Strauss **Women's Wonder Drops** was formulated using Traditional principles and practices in Herbal Medicine to provide women with a safe, balanced natural health product to support their reproductive system, while giving them a way to find pain relief from menstrual-related cramping and its consequential impact on their health and quality of life.

STRAUSS NATURALS WOMAN'S WONDER DROPS FOR MENSTRUAL PAIN AND CRAMPING

Strauss **Woman's Wonder Drops** is a liquid multi-herb combination product containing extracts of 11 different medicinal ingredient herbs, all of which have all been used Traditionally in Herbal Medicine as female tonics and as other remedies for the female reproductive system and in support of women's overall health.

The medicinal herbal ingredients in the **Women's Wonder Drops** have been used Traditionally in Herbal Medicine in different combinations to address various menstrual-related conditions:

Combination of squawvine, raspberry, crampbark, uva ursi, dong quai, goldenseal, and false unicorn used to help alleviate excessive/heavy bleeding associated with menstruation (menorrhagia).

•Combination of squawvine, raspberry, crampbark, dong quai, goldenseal, false unicorn, ginger and lobelia used to help relieve menstrual cramping (dysmenorrhea).

•Combination of blessed thistle and marshmallow used to provide supportive and complementary function/action to the main active ingredients and their use(s).

Medicinal Ingredients (per ml): Blessed Thistle, Squawvine, Raspberry Leaf, Crampbark, Uva Ursi, Dong Quai, Ginger, Lobelia, Marshmallow, Goldenseal, False Unicorn

Indications:

- To help relieve cramping (dysmenorrhea) associated with menstruation
- To help relieve pain associated with menstruation as a uterine tonic and astringent
- To help alleviate excessive/heavy bleeding associated with menstruation (menorrhagia)
- Menopause and hormone support

Dosage:

Women (18 years and over): 3 mL, 3 times per day. Take beginning 1 day before menstruation, and for a maximum of 3 days.

References available upon request.