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Holistic care, implementation of physical activity and a healthy lifestyle in patients with PMS symptoms

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ABSTRACT

Effective control of fertility and new social roles of women caused that the time when a woman experiences cyclical hormonal changes in the menstrual cycle and the possible adverse symptoms associated with it became the period prevailing during the reproductive period of a woman's life [1].

Premenstrual syndrome (PMS) comprises clinically significant physical and psychological symptoms that occur during the luteal phase of the menstrual cycle and cause significant distress and functional impairment [2].

A broadly understood change in lifestyle, diet, systematic increase in physical activity, reduction of stimulants, but above all, keeping a diary of observation of alarming symptoms positively affects the improvement of women's well-being, accelerates the diagnosis and start of treatment.

KEY WORDS: physical activity, stimulants, lifestyle, premenstrual syndrome (PMS), premenstrual dysphoric disorder (PMDD), symptoms associated,

INTRODUCTION

Premenstrual syndrome (PMS) is characterized by recurrent, moderate to severe emotional, physical, and behavioral symptoms that subside within a few days of menstruation. The overall prevalence of PMS in women of childbearing age is 47.8% worldwide [3]. PMS symptoms include changes in appetite, weight gain, abdominal pain, back pain, low back pain, headaches, breast swelling and tenderness, nausea, constipation, restlessness, irritability, anger, fatigue, restlessness, and moodiness. etc.

Premenstrual dysphoric disorder (PMDD) is a serious disorder that can affect relationships and work activities. The etiology of PMS is unknown, but several theories point to an increased susceptibility to normal hormonal changes and neurotransmitter abnormalities. Combined oral contraceptives and serotonergic antidepressants are effective treatments, but each represents a different treatment option for PMS/PMDD. Combined oral contraceptives appear to provide primarily physical relief [4].

Most women of childbearing age experience one or more mental or physical symptoms during the premenstrual phase of the menstrual cycle. Symptoms are mild, but 5-8% have moderate to severe symptoms related to significant stress or dysfunction. The WHO International Classification of Diseases (ICD) includes " premenstrual tension syndrome" under the category " Diseases of the Genitourinary Tract" [5].

Although premenstrual syndromes have been recognized for a long time, defining clinically significant premenstrual syndrome (PMS) and reaching consensus on diagnostic criteria has been extremely difficult. Many women do not meet the criteria for PMDD even though they have enough premenstrual stress to seek medical attention and can be helped with treatments that have been shown to work for the disorder. Among women of childbearing age, 50-80% have at least mild premenstrual symptoms, approximately 30-40% of women report PMS symptoms requiring treatment, and 3-8% of women suffer from PMDD meeting the strict DSM-IV criteria. However, most women with premenstrual symptoms experience a reduction in symptoms without diagnosis or treatment [6,7].

Many scientists claim that premenstrual syndrome may have a genetic basis [8,9]. This is evidenced by the high percentage (90%) of cases of identical twins, and research confirms that over 70% of women whose mothers suffered from PMS also experience its symptoms [8]. Thorough, long-term research on a specific gentype still remains without its identification.

The relevant literature, however, shows an association between an increased risk of PMDD and the occurrence of variant alleles of estrogen receptor α (ESR1) genes

[10,11]. In addition, other studies show a relationship between polymorphism in the gene encoding the 5-HT1A serotonergic receptor and the occurrence of PMDD [12].

SYMPTOMS

Symptomos Associated with Premenstrual Syndrome and Premenstrual Dysphoric Disorder	
Physical	**Psychological and Behavioral**
Abdominal bloating	Anger, irritability
Body aches	Anxiety
Breast tenderness and/or fullness	Changes in appetite (overeating or food cravings)
Cramps, abdominal pain	Changes libido
Fatigue	Decreased concentration
Headaches	Depressed mood
Nausea	Feeling out of control
Swelling of extremities	Mood swings
Weight gain	Poor Steep Or increased need for sleep
	Tension
	Withdrawal from ustal activities

Symptoms Associated with Premenstrual Syndrome and Premenstrual Dysphoric Disorder[13].

DIAGNOSIS

Some clinical entities may show PMS-like symptoms. These include substance abuse disorders, mood disorders (e.g. depression, anxiety, dysthymia, panic), psychiatric disorders such as anemia, anorexia and bulimia, and gynecological disorders such as endometriosis and dysmenorrhea, diseases such as hypothyroidism thyroid and others such as oral contraceptives. (OCP) or perimenopause. The clinical history is the key to diagnosing PMS or PMDD. Other mood disorders may have premenstrual cyclic exacerbations but do not have the asymptomatic mid-follicular phase (days 6-10 of the menstrual cycle) required for a clinical diagnosis of PMS or PMDD [14].

The diagnosis of PMDD requires

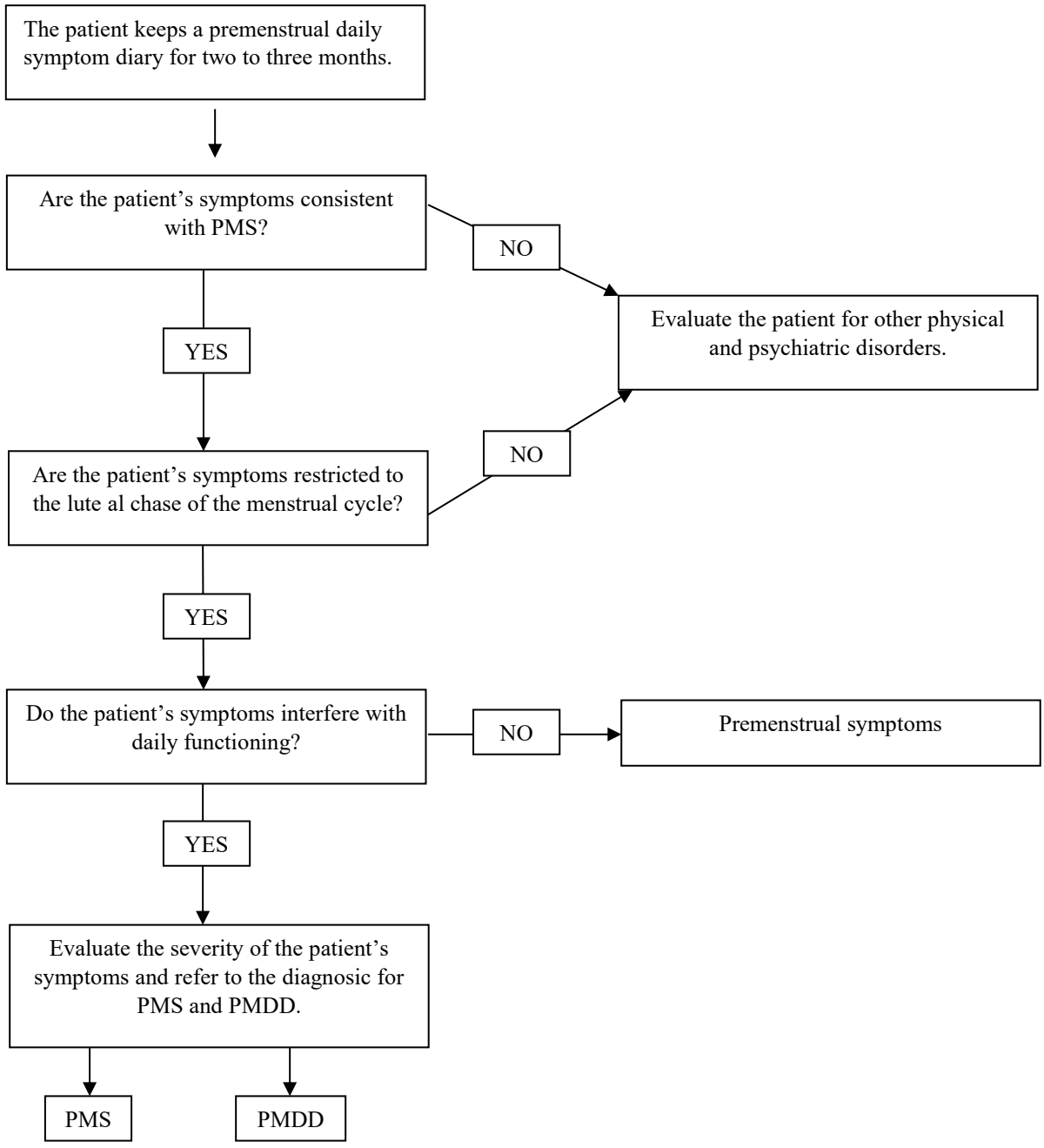
(1) the presence of at least five luteal phase symptoms (panel), of which at least one must be a mood symptom (i.e.,);

(2) 2-cycle daily charts to determine the time of onset of symptoms.

(3) Evidence of functional impairment. Finally, the symptoms should not be an exacerbation of another mental illness [15].

The problem with the diagnosis of PMDD is that many women with clinically significant premenstrual symptoms do not meet all the diagnostic criteria. You may be missing some mood symptoms or at least 5 different DSM IV symptoms. The American College of Obstetricians and Gynecologists (ACOG) tried to rectify this situation by defining PMS as moderate to severe. The criterion is the presence of at least one mental or physical symptom leading to significant functional impairment, confirmed by a prospective assessment [16]. A minimum of 2 repeatable full-blown cycles is required to establish PMS. Most often, the gynecologist recommends keeping a symptom diary, where their type, nature, intensity and relationship with menstrual bleeding are recorded. After a thorough analysis of the symptoms, the doctor should rule out other diseases that may cause similar symptoms.

DIAGNOSIS OF PREMENSTRUAL SYMPTOMS, PMS, AND PMDD



Ultrasonography, routine gynecological examination and, if necessary, other additional tests, including complete blood counts and sex hormone levels, are used for this purpose. Despite differences in diagnostic systems, women with clinically significant PMS reported in scientific reports usually correspond to women diagnosed with PMDD. It should be noted, however, that some clinicians and researchers have questioned whether all PMS symptoms should be considered part of a single syndrome. This is because while there is general agreement that all symptoms are caused by fluctuating sex steroids and resolve with the endocrine cycle stopping, common pathophysiological factors such as deviations in sex steroid production can contribute to symptoms. This is because there is no evidence of sparing [5].

Algorithm for use in differentiating premenstrual symptoms, premenstrual syndrome (PMS), and premenstrual dysphoric disorder (PMDD)[14].

ETIOLOGY

The etiology of PMS is unknown. PMS symptoms coincide with hormonal fluctuations in the menstrual cycle, suggesting hormonal imbalances such as excess estrogen or low levels of progesterone. Symptoms are also related to serotonin, an important etiological factor [17].

PMS symptoms are related to the influence of estradiol and progesterone on the neurotransmitter systems of the central nervous system, serotonin and gamma-aminobutyric acid (GABA). In women with symptoms of premenstrual tension, there is talk of a reduced level of serotonin in the peripheral blood as well as a reduced uptake of serotonin by platelets in the luteal phase. However, increased sensitivity of serotonin receptors is observed in the follicular phase [18].

Another confirmation of this theory is the effectiveness of treatment with a selective serotonin reuptake inhibitor (SSRI) or, alternatively, a selective serotonin and norepinephrine reuptake inhibitor (SNRI) [19]. Gamma-aminobutyric acid (GABA) is the most important neurotransmitter with an inhibitory effect on the nervous system. Clinical studies show a reduced level of GABA in the serum of women with PMDD in the luteal phase of the menstrual cycle compared to the control group [20].

PMS-related symptoms can make your mental state worse. The development of postpartum depression or perimenopausal depression is higher in women with PMS [21]. On the other hand, about 30% of women with symptoms have

PMS/PMDD had previous depression or a depressive episode, anxiety disorders [22]. Also, women who have not given birth and have low self-esteem because the values and stresses of life increase the risk of premenstrual syndrome.

TREATMENT

Many treatment regimens have been shown to be effective for PMS, but some are supported by clinical evidence. Some medications may be more effective for some symptoms, treatment should be individualized based on the symptom profile.

The main goal of treating PMS is to relieve symptoms and reduce its impact on daily activities. Drug treatment is always the first line of treatment for PMS, but recent research shows that combination therapy offers more benefits. A combination of pharmacotherapy (e.g., NSAIDs, SSRIs, anxiolytics, gonadotropin agonists (GnRH), spironolactone, oral contraceptives) with non-pharmacological treatments, mainly awareness and behavioral awareness, exercise, massage, light therapy, and modified diet and nutrition, has been shown to be beneficial in treating symptoms of tension premenstrual[23].

Physical activity is a very important method that relieves PMS symptoms. Thanks to it, the secretion of endorphins in the body increases, which can reduce the symptoms caused by cortisol (stress hormone). The use of a healthy lifestyle and the inclusion of movement in everyday life will improve mood, increase pain tolerance, as well as reduce the level of anxiety and fatigue. Systematic movement affects the alleviation of somatic symptoms, which include breast tenderness, bloating, nausea, diarrhoea, constipation, edema and increased appetite.

More and more applications, mainly at the beginning of the occurrence of pain, have:

a) a relaxing bath using, for example, a decoction of rose, hops and chamomile, which have antispasmodic, relaxing and antiseptic properties;

b) massage of the lower abdomen and back with oils, which reduces pain and muscle spasms. You can use geranium, calamus or evening primrose oil for this purpose. Please note that essential oils should not be applied directly to the skin as they can cause irritation. It is best to add 2-3 drops to a base oil, e.g. almond or olive oil;

c) compresses of the lower abdomen with a hot water bottle [6].

Cognitive Behavioral Therapy (CBT) is a method that focuses on correcting anxious and destructive thoughts, behaviors, and emotions. CBT helps you recognize these behaviors and helps you develop coping strategies to improve your daily functioning.

Vitex agnus-castus fruit extract is the only herbal remedy to help control PMS-related mood swings and irritability.[24]

A recent study of a combined oral contraceptive containing 0.02 mg ethinylestradiol and 3 mg drospirenone (a 24-day combined hormonal pill followed by an inactive pill for the last four days) showed improvement in PMDD symptoms.

Selective serotonin receptor blockers (SSRIs) may be used as first-line treatment for PMS with predominantly emotional symptoms[25].

SUMMARY

In each case of confirming the symptoms of premenstrual tension, starting from the first days of bleeding, it must be confirmed on the basis of an examination by a gynecologist who will select the diagnostic and therapeutic procedures.

The diagnosis of PMS is difficult due to the lack of clear symptoms on physical examination and the lack of diagnostic tests. Therefore, establishing the diagnosis requires the involvement of the patient, nurse and physician. The role of the patient can be to keep a diary to discuss symptoms and allow for early diagnosis, while the nurse can be extremely helpful in collecting full questionnaires from patients at monthly visits. On the other hand, doctors can use these tools to rule out other differences that may yield better results.

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