# Original Article: The Role of Complementary Medicine and **Appropriate Treatment Methods in Improving Symptoms of PMS**

Maryam Milani Fard<sup>1</sup>, Amir Mohammad Milani Fard<sup>2</sup>

- <sup>1</sup> Researcher at the Anesthesia and Pain &Molecular and cell Biology Research center, Faculty of Medicine Department of Anatomy, Iran university of Medical Sciences, Tehran, Iran
- <sup>2</sup> Graduate of nursing, School of nursing and medical emergency, Alborz University of Medical Sciences, Researcher of Baqiyatallah Hospital Research Center, Tehran, Iran



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## <u>A B S T R A C T</u>

A woman may be able to relieve her premenstrual syndrome and diagnose it, meaning that when the symptoms are not severe, "natural methods or general measures to relieve premenstrual syndrome" that include education and awareness, change in diet, vitamin diet and exercise and deep thinking, effectively help her to overcome her syndrome. In fact, even if the woman's symptoms are severe - whether they are difficult to see or weaken the patient - she should treat herself with "natural methods". Recognition of the disease by the patient, spouse, and family members is very important because PMS is a very important cause of couples arguing. A woman who suspects that she has premenstrual syndrome should see a doctor who treats the syndrome. If a woman does not have a menstrual calendar before consulting, her doctor will ask her to record the menstrual calendar for a period of two or three months. The doctor will also take tests. It is at this point that the doctor should inform the woman how she can use the natural way to reduce her symptoms. If natural methods do not reduce the severity of symptoms after a few periods of menstruation, and blood tests show a severe hormonal imbalance, medication should be used. However, the "medical method for relieving the syndrome" should also be applied in conjunction with a natural diet.

#### Introduction

ormone therapy is recommended for women who find that their syndrome is causing symptoms that could damage their personal relationships; it prevents them from their natural duties and affects their quality of life [1]. Your doctor may

detect hormonal imbalances by looking at blood tests and start medication. The syndrome may be so severe that the doctor will have to treat it before the results of the blood test are available and prescribe the appropriate dose of the drug after the test results are known. In fact, the doctor decides to take immediate medication when there is a problem with the patient's health [2]. At such a stage,

<sup>\*</sup>Corresponding Author: Maryam Milani Fard (maryammilani837@yahoo.com)

procrastination in receiving blood test results makes the patient's condition worse [3]. For example, when a woman's bladder is infected, the doctor will start treatment immediately if she feels that waiting for a urine culture and allergy test will hurt the patient. When the results of the urine analysis are finally known, the doctor will change her medication if the test results show that proper treatment has not been given. In the case of premenstrual syndrome, "natural methods" should be continued, even if medication is used. In fact, natural methods should always be the first way to alleviate premenstrual syndrome [4]. According to the "adoption of a new method", you will see that premenstrual syndrome is divided into four categories, in which the woman falls into one of these categories according to her symptoms [5]. The woman should look at the signs in the menstrual calendar, and review the four categories. Knowing her personal syndrome, the woman realizes that special treatments should be emphasized on her more than other treatments [6]. For example, if she feels that her premenstrual stress syndrome is A-

type (anxiety, irritability, nervous tension), it is more necessary to use stress-reduction techniques than to reduce the patient's body salt, or for a woman whose stress is a type of premenstrual stress (H) (weight gain, bloating, dehydration). Salt reduction is of particular importance. However, no matter what kind of syndrome the woman is trying to control, all-natural methods should be used in her treatment plan. Premenstrual syndrome is a regular condition that can only be overcome with full attention to physical and mental treatment, not just by considering the symptoms of the syndrome [7]. However, all family members must be aware of the treatments used and assist the patient in the treatment and recovery phase. The patient's close support is important in overcoming this syndrome [8]. According to the available treatment methods; each of which has effects on improving the symptoms of PMS (Fig. 1). The role of complementary medicine, which includes diet, micronutrients, herbs, and physical activity, can be referred to as medication and surgical treatment [9].

## Carbohydrate Basics

## Carbohydrates

Compounds made of single sugars or multiples of them and composed of carbon, hydrogen, and oxygen atoms.

- ✓ carbo = carbon (C)
- √ hydrate = water (H₂O)

### Complex carbohydrates

Long chains of sugars (glucose) arranged as starch or fiber. Also called polysaccharides.

- √ poly = many
- √ saccharides = sugar unit

## Simple carbohydrates (sugars)

Single sugars (**monosaccharides**) and the pairs of sugars (**disaccharides**) linked together.

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Figure 1. The Carbohydrates: Sugar, Starch, and Fiber

## **Diet Modification**

## Consumption of salt

Salt or sodium chloride maintains the amount of fluid in a woman's body. However, hormonal imbalances, i.e. excess estrogen or an imbalance in the aldosterone system, may increase the body's salt [10]. This is where excess salt stores water in the body, causing the body's tissues, including the meninges to swell. Eventually, the brain swells, and the membrane on it expands to the size of a woman's

skull [11]. And if the brain is not in the cranial area, the swelling increases, the water pressure inside the head stimulates the nerve endings of the brain [12]. As a result, the woman suffers from headaches, dizziness, anxiety, anger, and confusion. In addition, it may add weight. If you have to bloat, the symptoms may go away if you reduce your salt intake. Eating salty foods such as salty meats is recommended [13]. Salt, pickles, sauerkraut, and a mixture of spices, mustard, and salt such as salted garlic should be avoided in the evening. If a woman wants to add spices to her food, she can use powders

and peppers that are low in salt, or salt substitutes that can be found in the markets [14]. Of course, the best way is not to use any salt in cooking and not to have salt on the table. A woman can also be careful about the amount of salt she uses in packaged foods; she should pay attention to the items used in frozen or canned foods that have the amount label on them [15]. So, it is especially important to follow a low-

salt or low-salt diet two weeks before menstruation, when the symptoms of the syndrome usually get worse. If a woman still suffers from dehydration, diuretics may be effective [16]. It should not be forgotten that diuretics never cure the symptoms of the syndrome. Diuretics do not cause the loss of fluid and intracellular sodium, which are specific symptoms of the syndrome (Fig. 2) [17].

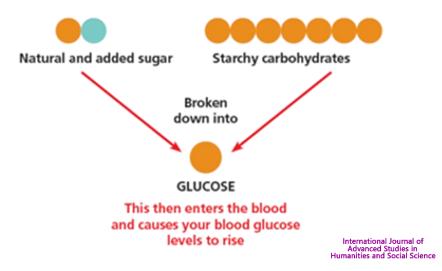
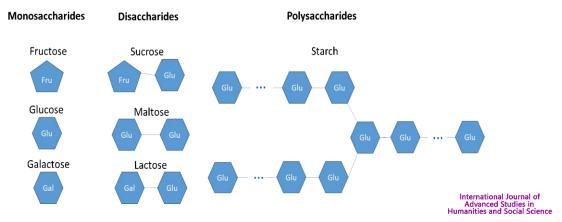


Figure 2. Understanding carbohydrates

## Carbohydrate (sugar and starch)

During the second half of menstruation, an imbalance in the secretion of brain hormones and neurotransmitters, an imbalance in the females' hormones, estrogen and progesterone, or a combination of different hormonal imbalances. causes a woman with the syndrome to have a strong desire to find sugars and starches. The cells store insulin, and insulin levels rise in the second half of the menstrual cycle [18]. An increase in insulin levels may be due to one or a combination of hormonal imbalances. However, too much insulin causes the body's blood sugar to drop rapidly. So, it is likely that a woman with the syndrome, who has a strong craving for sugars and starches, has high body insulin and low blood sugar [19]. This means that if she tries to consume too much sugar to quench her cravings for sugars and starches, she may develop hypoglycemic-like shock. In this way, the immediately absorbed sugar will raise her insulin, which was high, and lower her blood sugar, which was low [20]. An attack of hypoglycemia, which often lasts for thirty or sixty minutes after hypoglycemia, can lead to headaches, depression, anxiety, and irritability. A woman with premenstrual C-cravings and hypoglycemic symptoms should eat every three hours to keep her blood sugar steady. He should refrain from eating foods that are pure carbohydrates, such as sugar, pure flour, chocolate, and honey, and should eat light foods that contain protein and natural carbohydrates (Fig. 3) [21]. A woman can eat cheese, yogurt, nuts, sunflower seeds, eggs, fruits, and vegetables that she likes, as well as legumes that are more attractive than sweets. If the carbohydrate/protein combination or protein such as lean meats, chicken, boiled eggs, and soy milk is eaten alone at regular intervals, it will reduce cravings. A woman with the syndrome may forget to eat at regular intervals, resulting in a craving for sugars and starches; depression can also occur [22]. In such a situation, eating natural carbohydrates without protein such as fresh fruits, vegetables, legumes, and beans, whole grains, nuts, and legumes will be beneficial. Researchers at the Massachusetts Institute of Technology have linked the brain's chemical serotonin, which regulates human mood, to a craving for carbohydrates [23]. What we call the craving for carbohydrates that a woman experience maybe how she works to increase her serotonin stores [24]. The presence of the amino acid tryptophan is essential for the production of serotonin, and when a woman eats carbohydrates, it helps tryptophan reach the brain, where serotonin production is necessary. It is natural that when a woman has a great craving for sweets, nothing can satisfy her except pure sugar [25]. If a woman eats a piece of cake or cake slowly, it will not be harmful to her health; she can quench her cravings by tasting and relaxing a piece of cake, until she swallows something quickly [26]



**Figure 3.** Carbohydrate and Sugars Terminology

## Consumption of fluids

A woman who, due to accumulation of water in the body, experiences swelling all over her body, especially around the joints of the limbs and abdomen, should limit fluid intake seven days before menstruation [27]. He should not drink more than four glasses or cups of fluids a day. Swelling is a sign that the salt content in his body has increased, and the salt retains excess water in the body. Fluids are usually excreted by the kidneys, but when a woman has edema due to premenstrual syndrome, the amount of salt in her body causes the fluid to be absorbed by her body tissues before it passes through her body. It is important to remember that the brain, which swells along with other parts of the body, causes stress, irritability, and confusion. But when they do not have these symptoms, they should not change their habit [28].

#### Minerals and vitamins

According to two Nobel Prize winners, Dr. Linus Paulink, every illness can be attributed to a mineral deficiency. Minerals that reduce the severity of premenstrual syndrome symptoms include calcium, magnesium, zinc, iron, potassium, electrolytes, and vitamins B, D, E, and C, which are also important for the body's balance to reduce the severity of the premenstrual syndrome. One way of natural relief is for a woman to take a full course of mineral and

vitamin supplements, or to take only those minerals and vitamins that are specific to treating symptoms [29]. Minerals and vitamins should be taken daily, but as explained in the following sections, they should be increased during the second half of menstruation or when symptoms of the syndrome appear [30].

## **Physical Health and Premenstrual Syndrome**

It is generally believed that if a woman is in good condition, she rarely develops the syndrome, and if she does, it is mild. Doctors always encourage women to include exercise programs in their daily lives. Exercise is an important part of the natural way of healing. Now we have to see how much exercise a woman should exercise. Excessive physical activity, such as brisk dancing, cycling, and jumping up and down, can lead to a complete cessation of menstruation [31]. Because too much exercise causes weight loss, and changes in a woman's hormonal balance. This hormonal change prevents the release of the brain hormones LH and FSH. Blood cells in physically active women need to be high to get more oxygen to their muscles, and usually, a woman who is not menstruating has more blood cells than normal. In this way, the body also protects itself from the risk of anemia. If an active and thin woman loses a lot of blood in each menstrual period, she may be at risk for anemia [32]. Hormonal changes that cause menstruation to stop can also cause the premenstrual syndrome. However, a woman who has stopped menstruating is less likely to experience the syndrome. But it is not completely safe from its occurrence. The female body produces estrogen, which remains in the body due to the cessation of menstruation. In such a case, if a woman suffers from a stressful headache, it means that there is too much estrogen. In such a case, the reduction of a woman's physical activity causes a huge difference in the normal state of her body [33].

Moderation in exercise is the way to control this syndrome. Hormones, especially brain hormones, are overly sensitive to a woman's diet and exercise. If one of the items in the daily diet becomes more than usual or is eliminated altogether, the amount of these hormones will increase or decrease. Because stress upsets a woman's hormonal balance, some exercises that reduce stress can make menstruation worse [34]. But if a woman notices that her inner alignment with her menstrual cycle has changed fundamentally, she should change her exercise program. Researchers have found that symptoms of central nervous system stress are reduced in women who exercise. However, the stress of women who turn to gymnastics is not relieved. Gymnastics and most stimulant exercises, which take less time than other exercises, are more beneficial to skeletal muscle than the brain. Exercise has a greater effect on brain hormones if female athletes who complain of headaches get rid of their headaches after exercise. A woman who has exercised in the past will lose weight if she eliminates it from her daily routine and may overheat due to the syndrome, and temporarily gain weight. Or a woman who was initially overweight, being overweight can cause her hormonal imbalance, which is referred to as a premenstrual syndrome. And such a state causes craving to eat and as a result more weight [35].

## **Special Exercise for Premenstrual Syndrome**

The bodybuilding program, developed by Olinda and Lazarus Sedno (2016), co-founders of ExcessPlus, New York, is a great way to reduce stress and relieve premenstrual syndrome. If a woman continues to exercise every day, she will get the most results. She should do the exercises at least three times a week, and increase the frequency to four or five times or more during the premenstrual period. According to Olinda patients, they have

been relieved of premenstrual discomfort with the mentioned exercises. To begin practicing the special movements of this syndrome, sit on the carpet and follow Olinda's instructions [36].

## Stretching the upper back

Sit on all fours the Indian way. Lock your hands behind your head, and open your arms with your elbows facing out. Keep your chest wide open and straight; loosen the shoulders; look ahead. Open your mouth slightly to swallow two breaths. While exhaling, pull your abdomen in as far as you can; bend your back and stick your chin to your chest; pull your abdomen in more firmly, and stretch your upper back. Take a deep breath, and slowly return to the original position. Do this exercise a lot and do it four times. In the fourth round, instead of returning to the first position, inhale and exhale, and lean forward while the head is in contact with the floor. In this case, arch your back; pull the abdomen inward. Spread your elbows apart. As you continue to stretch until your head finally touches the ground, inhale and exhale [37].

## Rhythmic breathing

Sleep on your back; bend your knees, keep your legs slightly apart, and place your arms on the floor along your body. Loosen your arms and legs; the palms of your hands are facing the ceiling or the floor - in whichever position you feel most comfortable in. Stretch your neck outward, bring your elbows to your chest, and open your mouth slightly [38]. Breathe slowly through the mouth with two numbers. While suffocating the breath. The air must first fill the abdomen and chest. Take a breath with number one; extend the abdomen; fill the chest with air number two, then breathe slowly as you exhale in the opposite direction. In this way, first, empty the air with the number one from the chest and then with the number two from the abdomen. Perform this breathing exercise for eight slow rhythmic rounds while your spine is fully in contact with the ground [39].

## Comfort mode

In addition to relieving the symptoms of premenstrual syndrome, this exercise relieves menstrual contractions during the menstrual cycle. Lie on your back. Bend your knees over your chest;

loosen the legs; hold the knees with your hands. Pull your knees to your armpits. Open your mouth slightly and inhale with two numbers. Exit with two numbers. Continue this exercise ten times or until you feel more relaxed. Circulation of the legs in this position increases blood flow. Pull the toe out; draw a circle outward in space. Then bend the toe inward. Repeat this exercise five times. Now bend the toe inward; draw a circle in space. Repeat this five times [40].

To have a comfortable position to relieve premenstrual syndrome, lie on the floor; pull your knees up as high as your chest. In this position, repeat the toes of both feet in a circular motion five times to the left and continue the exercise as long as you need [41].

#### Pendulum

Lie on your back. Fold the left foot, and place the sole of the left foot on the floor. Pull the right foot on the ground and then bend the same foot. Loosen the arm along [42].

As you breathe in with two numbers, follow the previous pattern of rhythmic breathing. Gently exhale with two numbers, so that the air comes out of the abdomen first with number one and then with number two. As you exhale, slowly raise your right foot toward the ceiling while keeping your foot at the right angle to your body, keeping your foot straight and the sole of the foot curve. Gently inhale with two numbers, keeping the sole of the foot parallel to the ceiling. Exhale with two numbers. And while doing this, take your belly in; Squeeze your serine, lower your leg. Keep the knee straight; Hold the thigh tight; Bend your leg and apply pressure to your scalp as you lower your leg. But do not let your feet touch the ground. Keep your feet two to five inches above the ground. Inhale with two numbers; Slowly exhale with two numbers, and raise your right foot to the ceiling again, repeating this exercise six times, first with the right foot, then with the left foot.

## Pull forward

Sit up straight with all your weight on your head. Place your left foot on the floor, and arch the soles of your feet. Bend your right leg on the floor so that the sole of your right foot touches the thigh of your left foot. Raise your hand so that it is parallel to your

ears. Hold your fingers towards the ceiling and inhale with two numbers. Pull your abdomen in as you exhale; relax the muscles. Bend your head slightly down; bend your back; bend at the hip and along the left leg. Do this in a way that bends the back of the arch and relaxes the shoulders. In this position, try to touch the toe of your left foot with your open toes. In this exercise, you do not have to touch the toe of your foot, which is this important stretch. Return to your original position and sit with your hands and arms raised above your head as you breathe in and out. Breathe in with two numbers; exhale and do this movement six times with the left foot and six times with the right foot [43].

## Loosening

Stand with your legs spread as wide as your hips. Raise your hand parallel to your ears; fingers facing the ceiling. Slowly inhale with two numbers; as you exhale with two numbers, bring your abdomen in. Bend your knees slightly. With your arms attached to your ears, bring your arms and then your upper body down to the floor. In this position, arch your back, and lower your hands until they reach the ground and hold the back of your ankles with your hands, and at the same time inhale with two numbers. While exhaling with two numbers. Insert the abdomen and stretch your head between your legs. Relax your body, take a deep breath with two numbers. And once you exhale, pull your abdomen in and stretch your head between your legs. Do this exercise four times. Release your ankles after the fourth time. Let the arms are loose and hanging; straighten your legs and let them hang over your torso. Breathe in with two numbers, and focus the weight of your body on your heels. Take a deep breath; pull the abdomen in and straighten the back vertically and stand. In this case, the hand should be on both sides of the head and face forward. This is the end of the body relaxation exercise. In this exercise, blood flows in the opposite direction; and its flow is accelerated; it stretches the back and spine, and relaxes the body.

## **Conclusion**

It is another natural multivitamin-mineral that plays a very important role in preventing the symptoms of PMS. This supplement is available in doses of 400 to 600 mg, which is recommended to be consumed 4-6 capsules daily to supply magnesium. Of the 40 million women with PMS, about 50 million need medication to treat their mental state and behavioral changes. In these women, the symptoms of PMS do not go away naturally. Medications are divided into the following six categories, each of which is briefly described and the effect it will have on PMS symptoms. It is important to note that however, the amount of medication and the duration of treatment are difficult because hormonal changes occur in different ways in different months and are in response to daily changes in life. It turns out that the treatment that is useful in one month may be inappropriate the next month, or, conversely, the need for pregnant treatment may disappear altogether.

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