

Relief of premenstrual syndrome in highly qualified female athletes using traditional Chinese medicine

YES. Lavrinaitis¹, G.G. Ayubov²
(¹VNIIFK, ²Center of TCM "Creat")

Questions leveling depressing actions premenstrual syndrome (PMS) on the physical performance of highly qualified athletes are currently quite acute. The PMS problem is especially relevant in those sports disciplines where there is prolonged contact with cold and water (swimming, water polo, synchronized swimming, diving, skiing). It should be noted that more than 70% of athletes suffering from even mild forms of premenstrual syndrome and other menstrual irregularities note a noticeable negative effect of the disease on general and special performance, on everyday life and family relationships. This explains the relevance of the search and development of means for effective prevention and treatment of menstrual dysfunctions.

In recent years, a number of theories have been put forward to explain the reasons for the development of this syndrome. The most complete theory of hormonal homeostasis disorders is still considered, according to which premenstrual syndrome is a consequence of imbalance of estrogen and progesterone in a woman's body. The most substantiated within the framework of this theory is the point of view that speaks of hyperestrogenism. Estrogens cause sodium and fluid retention in the intercellular space and lead to the development of edema. In addition, under the influence of estrogens, the secretion of angiotensinogen by the liver, a protein that is a precursor of angiotensin II, increases. High levels of angiotensin II increase the production of aldosterone, which in turn leads to fluid retention and edema. Estrogens stimulate the adrenal glomerular zone, as a result, the secretion of aldosterone is also increased. Estrogens can accumulate in the limbic system and lead to the development of neuropsychiatric symptoms in PMS.

An excess of estrogen causes hypoglycemia, which is expressed by a feeling of fatigue, increased fatigue, and adynamia. The dominance of this point of view has led to the development of methods for treating PMS, mainly using hormonal drugs. In order to relieve pain, antispasmodic and analgesic drugs are usually used.

Until recently, modern medicine has not proposed any sufficiently effective method for correcting menstrual irregularities in athletes.

Reception of antispasmodic drugs, hormonal contraceptives often has a pronounced suppressive effect on the general and special performance of the body of athletes. That is why traditional Chinese medicine (TCM) methods have attracted such close attention of sports medicine specialists.

For four years, 24 athletes were under our supervision.

The main sports specialization is water sports. Almost all the girls noted a history of painful premenstrual syndrome, accompanied by constricting pain in the lower abdomen. General working capacity during this period decreased, in a number of cases the implementation of training and competitive activities was simply impossible. During the initial examination and detection of complaints, it was found that in many athletes, PMS closely correlated with increased pain in the lower back and sacrum, aching character, a feeling of heaviness and "fullness" in the lower back, pain in the knee joints of an aching character. In this case, the cold (being in the water) causes an increase in the pain syndrome.

Warmth and massage (warming up) are pleasant. During the examination, drowsiness, lethargy, some lethargy, unwillingness to exercise were striking. Two athletes had pain in the hip joints. When examining the tongue, teeth imprints on the lateral surfaces and a pale bluish tinge were noted, the coating on the tongue was thick and slippery, which indicated the emptiness of Qi and blood, as well as the presence of cold and dampness in the body. The pulse in most cases was stringy, tight and slow, which, from the point of view of the fundamental theory of traditional Chinese medicine, corresponds to the syndrome of accumulation in the body of dampness and external cold injury.

Table 1

Characteristics of the contingent by sports specialization

№	Спортивная специализация	Количество спортсменов
1.	Плавание	10
2.	Синхронное плавание	4
3.	Водное поло	3
4.	Прыжки в воду	4
5.	Водные лыжи	2
6.	Лыжные гонки	1

table 2

Characteristics of the contingent by age

№	Возрастной диапазон	Количество
1.	16 – 20	9
2.	21 – 25	9
3.	26 – 30	4
4.	31 и старше	2

Thus, the syndromic diagnosis from the point of view of BMT is as follows: stagnation of cold and dampness in the lower part of the body, stagnation of cold and dampness in the Zhen-Mai canal; Bi-syndrome due to external cold and

accumulation of dampness against the background of emptiness of Qi and blood; stagnation of qi and blood due to blockage by cold and dampness. With the exception of some clinical and diagnostic nuances and individual characteristics of each of the patients, in general, such a clinical picture was observed in all athletes, due to the same conditions of training and competition.

Therapeutic measures, according to the TCM theory, should be aimed at removing cold from the body, draining dampness, replenishing blood and Qi, restoring movement in the channels, eliminating stagnation of Qi and blood. The therapeutic principles of the treatment of this syndrome with TCM methods include the use of acupuncture, cauterization and heating of acupuncture points and zones, as well as the use of TCM drugs.

Points used for acupuncture: San yin jiao (RP 6), Xue hai (RP 10), Zu san li (E 36), Tai xi (R 3), Wei zhong (V 40), Pi shu (V 20).

Alternate pricking and warming up was carried out at the points: Guan yuan (VC 4), Ran gu (R 2), Shen shu (V 23), Ming men (VG 4), Yong quan (R 1), Qi hai (VC 6).

At the same time, the points Yao yang guan (VG 3), Huan tiao (VB 30) were warmed up and pricked.

Warming was carried out through the ginger plates of the Shen que point (VC 8). Warming up was carried out with wormwood cigars and wormwood cotton cones. In a number of cases, heating was carried out through the "Shi Quan Da Bu Wan" medicinal pills.

Inside were prescribed Chinese medicines "Xiao yao wan", "Gui zhi fu lin wan", "Bai feng wan".

In all cases, therapeutic measures led to a positive effect to one degree or another. Not all female athletes have brought the treatment process to clinical completion, due to the peculiarities of the competition schedule and training camps.

All athletes (100%) showed either the disappearance of pain or a significant decrease in their intensity. In 17 (70.8%) girls, lower back pain significantly decreased or disappeared completely. In 10 (41.6%) cases, complete recovery was achieved. The follow-up period is from 1 to 2.5 years.

In 5 girls, the peculiarities of the secretion of estradiol and progesterone were assessed in the first phase of the menstrual cycle (on the 5-7th day) and in the second phase of the cycle, as well as changes in the level of estradiol and progesterone before treatment and 3 months after the start of treatment.

The data of hormonal examination after treatment indicate the restoration of the normal level of estradiol in the I and II phases of the menstrual cycle (respectively, 246.6 pmol / l, $p < 0.05$ and 232.5 pmol / l, $p < 0.05$). In addition, as a result of the treatment, the stimulation of aldosterone production was reduced, which led to the prevention of fluid retention in the body. Clinically, this was expressed in a decrease in the tension of the mammary glands in the premenstrual days, a decrease or disappearance of the feeling of heaviness in the body.

Table 3

Treatment results

№	Результаты лечения	Количество
1.	Без улучшения.	-
2.	Купирование болевого синдрома с уменьшением сопутствующей общей симптоматики.	14
3.	Полное выздоровление.	10

conclusions

1. The methods of traditional Chinese medicine can be viewed in as an alternative independent method of PMS treatment in highly qualified athletes.

2. Inclusion of methods in the training programs for elite athletes Traditional Chinese medicine can significantly reduce the influence of limiting factors, which, of course, include PMS.

Literature

1. Seyfulla R.D, Ordzhonikidze Z.G. and others. Medicines and dietary supplements in sports // A practical guide for sports doctors, coaches and athletes. - M.: "Litterra", 2003. - 320 p.

2. Taymazov V.A., Tsygan V.N., Mokeeva E.G. Sports and immunity. - SPb.: "Olymp SPb", 2003. - 200 p.

3. Lavrinaitis D.A. Traditional Chinese medicine in sports. - Novosibirsk: "Lee West", 2004. - 128 p.

4. Ailamazyan E.K., Potin V.V., Svechnikova F.A., Niauri D.A. // Bulletin Russian Association of Obstetricians and Gynecologists. - 1994. - No. 1. - P. 46-55.

5. Schenker D. Stress and infertility // Obstetrics and gynecology. - 1993. - No. 2. - S. 40-42.

6. Yakovleva R.B., Zheleznaya R.A. Generative function formation girls // Pediatrics. - 1991. - No. 1. - C. 87-88.

Lavrinaitis, D.A. Relief of premenstrual syndrome in highly qualified athletes using the methods of traditional Chinese medicine / D.A. Lavrinaitis, G.G. Ayubov // Traditional medicine. - 2007. - No. 4 (11). - S.31-33.

[To favorites](#)