

Application of reflexology methods in diagnosis and treatment cardialgia in the perimenopausal period

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Application of acupuncture methods in diagnosis and treatment of cardialgias in perimenopausal period

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RESUME

Cardialgia among women of the perimenopausal period has different etiology and requires careful diagnosis and comprehensive treatment. Auriculodiagnostics helps to detect disturbances in various organ systems, acupuncture can influence the whole spectrum of the detected abnormalities, significantly reducing the severity of psychovegetative disorders and pain, which are particularly important for the treatment of patients with intolerance or contraindications for available drug therapy.

Keywords: cardialgia, reflexology, menopause.

SUMMARY

Cardialgias in women in the perimenopausal period have a different etiology and require careful diagnosis and comprehensive treatment. Auriculodiagnostics helps to identify violations in various organ systems, and acupuncture allows you to influence the entire spectrum of detected abnormalities, significantly reduces the severity of psychovegetative disorders and pain syndrome, which is especially important for the treatment of patients with existing intolerance or contraindications for drug therapy.

Key words: cardialgia, reflexology, menopause.

Introduction

The problem of cardialgia of menopause in women today continues to be relevant, requiring careful study and search for effective solutions. According to available data [18], by 2020 the number of women in the menopausal period will be 47 million. And since the manifestations of menopausal changes in the body cover the age interval from 35 to 55 years, ie the age of maximum professional maturity and skill, the importance of the problem in the socio-economic aspect becomes clear.

Another reason why cardialgias in the menopausal period require special attention is the need for a clear differentiation of pain in the chest area caused by a change in hormonal status from pain syndrome caused by

pathology of the coronary vessels of the heart. A similar clinical picture and the presence of changes in the electrocardiogram (ECG) can cause an incorrect diagnosis, and, consequently, the appointment of incorrect and ineffective treatment. "The problem of cardialgia itself is associated, first of all, with overdiagnosis of coronary pathology, leading to intimidation of patients, unnecessary heparinization of patients, transfer to disability due to misdiagnosed myocardial infarction of people who, with the right approach, did not even need a sick leave, no appointment the necessary drugs "[4].

As statistics show, among the total number of patients with complaints of pain in the region of the heart, ischemic heart disease (CHD) is diagnosed in 15–34% of cases [7], benign musculoskeletal pains are detected in 28% [16], Ryss Ye.S. [12] states that in 50% of cases, cardialgia not associated with coronary heart disease is caused by pathological gastroesophageal reflux. Also, according to the literature, from single observations to 60% of cases, practitioners have to deal with cholecystocardial syndrome in this category of patients [5]. In 71.4–88.9% of cases, climacteric cardiopathy occurs with cardialgic syndrome [9]. According to available data, in the presence of pain in the region of the heart with unchanged coronary arteries, in 37–43% of patients, signs of panic disorders are revealed [2]. Besides, psychovegetative disorders can accompany somatic pathology, aggravating the course of the underlying disease, or come to the fore as the cause of cardialgic syndrome. In this regard, a psychogenic factor is present in 80% of cardialgias of various origins.

The main conclusion to be drawn based on the above data is that cardialgia in perimenopausal women requires a comprehensive examination and selection of complex therapy, taking into account all pathogenetic factors.

Currently, the climacteric period is usually divided into four phases: premenopause, menopause, perimenopause, postmenopause [11]. Premenopause is associated with the onset of a decrease in ovarian function, characterized by an increase in the frequency of anovulatory cycles, a change in the duration of the menstrual cycle. Menopause is the last spontaneous menstruation for a woman. The date of menopause is set after 12 months of absence of menstruation. Perimenopause is the period from the manifestation of the first symptoms of an estrogen-deficient state to two years after the last spontaneous menstruation, after which postmenopause occurs, ending at 65–69 years [19].

Menopause is associated with involutional processes occurring in a woman's body and her reproductive system, which is based on age-related hormonal changes in the hypothalamic-pituitary structure of the brain, which entails irreversible changes in the cyclic function of the pituitary gland and, as a consequence, changes in the function of the ovaries [1] ...

A universal hormonal sign of the premenopausal period is an increased level of gonadotropins (especially follicle-stimulating hormone (FSH) over 20 mU / L) in blood plasma and a sharp decrease and subsequently a deficiency of estrogen in the peripheral [10].

For postmenopause, the following hormonal criteria are characteristic: low estradiol level (<80 pmol / l); high content of FSH; luteinizing hormone / follicle-stimulating hormone (LH / FSH) index less than one; the value of the ratio of estradiol / estrone is less than one; possible relative hyperandrogenism; low inhibin level [11].

Considering the fact that according to the available information, different types of estrogen, progesterone and androgen receptors are located not only in target organs (uterus, mammary glands), but also in the central nervous system, bone cells, vascular endothelium, connective tissue, urogenital tract, in the mucous membranes, as well as in myocardiocytes, it becomes clear that the deficiency of sex hormones causes changes in all these organs [13].

Hormonal changes in menopause, as a rule, are manifested by a complex of vegetative-vascular, metabolic-endocrine, psycho-emotional disorders until the body adapts to a new state of estrogen deficiency.

One of the most famous and widespread early manifestations of the climacteric period is climacteric syndrome (CS), manifested by vasomotor complaints - "hot flashes" and sweating. There are three forms of the clinical course of CS: typical, complicated and atypical. The latter includes climacteric myocardial dystrophy. At the same time, patients complain of pain in the region of the heart that is not associated with physical activity and does not stop after taking nitroglycerin. On the ECG, repolarization disorders are recorded, as a rule, of a transient nature - the T wave can be smoothed, flattened, negative; most often, the above changes are visualized in the right (V1 - V3) and left (V4-V5) chest leads; the ST segment can be displaced downward from the isoline, but not more than 1 mm, at the same time, the amplitude of its oscillations is 1–20 mm. The examination algorithm for this category of patients includes a set of laboratory and instrumental studies: ECG, 24-hour Holter ECG, exercise test - bicycle ergometry, study of lipid and carbohydrate metabolism, as well as levels of sex hormones.

Objective

To study the effectiveness of the application of reflexology methods in the treatment of cardialgia of the perimenopausal period.

Research objectives

1. Evaluate the data of clinical and instrumental examination methods.
2. Conduct an assessment of the psycho-emotional and vegetative status of patients, and the severity of climacteric and pain syndromes.
3. Conduct a survey by auriculodiagnostics methods.
4. To evaluate the effectiveness of reflexology methods in the treatment of cardialgia perimenopausal period.

Materials and methods

The group of examination and treatment consisted of 43 women of the perimenopausal period 45–65 years old with moderate climacteric syndrome and

the presence of cardialgic syndrome without signs of ischemic heart disease (according to ECG, EchoCG, 24-hour ECG monitoring and exercise test).

X-ray examination of the cervical and thoracic spine, ultrasound examination of the abdominal cavity and pelvic organs, esophagogastroduodenoscopy, clinical blood and urine tests, determination of the hormonal profile were carried out.

The following comorbidities of clinical significance were identified:

1. Osteochondrosis of the cervicothoracic spine - 43 people (100%).
2. Dyskinesia of the biliary tract - 25 (58.1%).
3. Gastroesophageal reflux disease - 10 people (23.3%). The psycho-emotional state was assessed using the hospital scale of anxiety and depression HADS (0–7 points - normal, 8–10 points - subclinical anxiety / depression, 11 and higher - clinically severe anxiety / depression). The vegetative status was determined by calculating the Kerdo index (the index is 0 - eutonia, less than zero - parasympathicotonia, more than zero - sympathicotonia).

The severity of the menopausal syndrome was assessed according to the results of calculating the Kupperman menopausal index (12–34 points - mild, 35–58 points - moderate, more than 58 - severe),

A visual analogue scale (VAS) was used to determine the severity of pain in the chest area (0 points - no pain, 1–3 points - mild pain, 4–6 points - moderate pain, 7–10 points - intense pain).

Auriculodiagnostics: using a metal diagnostic probe, pressure was made in various projection zones of the auricle. The degree of pain in this area, color and condition of the skin were assessed. Diagnostically significant were: severe pain or lack of sensitivity when pressing on the point, the presence of hyperemia, seals, manifested capillary vessels [8].

Additionally, we used pulse diagnostics on the radial arteries. The degree of fullness of the pulse wave was assessed at diagnostic points on both hands [3].

Treatment was carried out metal needles for corporal acupuncture, metal balls for tsubo-therapy on the auricle.

Diagnostic results

1. Assessment of the vegetative status. Kerdo index data:
 - eutonic type of autonomic regulation - 21 people (48.8%);
 - sympathetic type of autonomic regulation - 13 people (30.2%);
 - parasympathetic type of autonomic regulation - 9 people (20.9%).
2. Assessment of the psycho-emotional state (hospital scale of anxiety and depression HADS):
 - subclinically expressed anxiety / depression - 29 people (67.4%);
 - no symptoms of anxiety / depression - 8 people (18.6%);
 - clinically expressed anxiety / depression - 6 people (14%).

3. Hormonal status:

- a decrease in the level of estradiol in 22 people (51.2%);
- decrease in progesterone - 43 people (100%);
- increased levels of luteinizing and follicle-stimulating

hormone - 43 people (100%).

4. Assessment of the severity of menopausal syndrome according to the Kupperman index:

- moderate degree (35–58 points) - 28 people (65.1%);
- mild degree (12–34 points) - 15 people (34.9%).

5. Violation of repolarization processes of non-coronary origin

ECG - 15 people (34.9%)

6. Assessment of pain syndrome according to VAS (visual analogue scale):

- 4–6 points - 37 people (86%);
- 7–10 points - 3 people (7%);
- 1–3 points - 3 people (7%).

7. Auriculodiagnostics: changes were revealed at points 55, 34, 26a, 29, 22, 23, 28, 45, 100, 42, 19, 53, 87, 88, 96 and 97 on the right, 58, 95, 37, 39

8. Pulse diagnostics:

- "emptiness" of the pericardial canal in combination with the "fullness" of the canal of the small intestine and a triple heater - 16 people (37.2%);

- "emptiness" of the spleen canal with "fullness" in the stomach canal - 14 people (32.6%);

- "emptiness" of the liver canal with the "fullness" of the gallbladder canal - 13 people (30.2%).

The above data indicate that climacteric syndrome can occur in various variants and with many concomitant diseases, which requires an individual approach in the treatment of this category of patients.

Treatment

All patients underwent a 10-day course of corporal and auricular acupuncture (5 days - daily, 2 days - a break, 5 days - daily). The points of choice are local, segmental, distant, taking into account the leading and concomitant pathology. For the period of a 2-day break of corporal acupuncture, tsubo-therapy on the auricles was used.

The points of the canal of the heart (C3, C4), the pericardium (MC6), the small intestine (IG1, IG2, IG11), the triple heater (TR3, TR7, TR15), the kidneys (R3, R6), the bladder (V14, V15, V17, V18, V20, V23, V43, V60, V66), lungs (P5, P9), large intestine (GI4, GI11), spleen (RP4, RP6, RP10), stomach (E25, E36), liver (F3, F13), gallbladder (VB 34, VB43), anterior median canal (VC12, VC15, VC17, VC18), posterior median canal (VG14).

Auricular points: 55, 34, 26a, 29, 22, 23, 28, 45, 100, 42, 19, 53, 87, 88, 96, and 97 on the right, 58, 95, 37, 39, taking into account the degree of hyperalgesia revealed in diagnostics.

Treatment results

The effectiveness of therapy was assessed by:

- the dynamics of the severity of the climacteric syndrome (Kupperman index);
- a decrease in the severity of pain syndrome (visual analogue scale

YOUR);

- the degree of regression of anxiety and / or depression (hospital scale of anxiety and depression HADS) against the background of reflexology.

Against the background of treatment, there is a decrease in the values of the Kupperman index to a weak degree of severity in 23.3% of cases (10 people).

A decrease in the severity of pain syndrome was observed in 95.3% of cases (41 people). Of these, in 4.7% (2 patients), the pain level decreased from severe to moderate, and in 86% (37 patients), moderate pain decreased to a mild level.

Table 1

Dynamics of indicators of Kupperman index according to the results of therapy,%

Тест	Баллы	Количество пациентов/% случаев		
		до лечения	5-й день лечения	после лечения
Индекс Куппермана	12–34	34,9 % (15 чел.)	46,5 % (20 чел.)	58,1 % (25 чел.)
	35–58	65,1 % (28 чел.)	54,5 % (23 чел.)	41,9 % (18 чел.)

There is a positive dynamics of the psychoemotional state in 93% of cases (40 people). The clinically pronounced level of anxiety / depression detected in 6 patients decreased to subclinical in 2 patients by the fifth day of therapy, and by the end of treatment in 3. Of 29 people with subclinical anxiety / depression identified at the beginning, normal values were noted at the end of therapy testing at 20.

Auriculodiagnostics showed a decrease in pain in the previously identified areas of hyperalgesia.

Pulse diagnostics: "alignment" in the channels in which an imbalance was found before starting therapy.

table 2

Dynamics of VAS indicators based on the results of therapy,%

Тест	Баллы	Количество пациентов/% случаев		
		до лечения	5-й день лечения	после лечения
ВАШ	1–3	7 % (3 чел.)	16,3 % (7 чел.)	65,1 % (28 чел.)
	4–6	86 % (37 чел.)	79 % (34 чел.)	30,3 % (13 чел.)
	7–10	7 % (3 чел.)	4,7 % (2 чел.)	4,7 % (2 чел.)

Table 3

Dynamics of HADS indicators based on the results of therapy,%

Тест	Баллы	Количество пациентов / % случаев		
		до лечения	5-й день лечения	после лечения
HADS	0–7	18,6 % (8 чел.)	34,9 % (15 чел.)	65,1 % (28 чел.)
	8–10	67,4 % (29 чел.)	55,9 % (24 чел.)	27,9 % (12 чел.)
	11 и выше	14 % (6 чел.)	9,3 % (4 чел.)	7 % (3 чел.)

Conclusion

Thus, the positive effect of reflexology on pain and psycho-vegetative symptoms in women in the perimenopausal period has been demonstrated, which is especially important for patients with existing contraindications for drug therapy. Since cardialgias in this age category can be polyetiological, reflexology is one of the optimal methods of treatment, because it allows you to influence several functional systems of the body in which there are disorders at once.

LITERATURE

1. Babichev V.N. Neuroendocrinology of the reproductive system // Probl. endocrinology. - 1998. - No. 1. - P.3-13.
2. Wayne A.M. Vegetative disorders. Clinic. Diagnostics. Treatment. - M.: Medical Information Agency, 2003. - P.14-170
3. Vogralik V.G., Vogralik M.V. Acupuncture. Fundamentals of traditional oriental reflexodiagnosics and puncture adaptive-energizing therapy: qi-gong. - M.: GOU VUNMTs RF, 2001. -- 336 p.
4. Vorobiev A. I., Cardialgia. - M.: NEWDIAMED, 2008 - 17 p.
5. Gridnev A.E. Cholecystocardial Syndrome: Health of Ukraine, Institute of Therapy. L.T. Small AMS of Ukraine, Kharkov. 2006. - No. 24/1 December.
6. Kiseleva T.L., Chepkov V.N., Karpeev A.A. Traditional medical systems of the world in Russia. - M., 2000. - pp. 14-18.
7. Maev I.V., Yurenev G.L., Pain in the region of the heart, not associated with cardiac pathology. Causes, mechanisms and tactics of the doctor // Consilium medicum. - 2011.– Volume 5. - №2. - P.10.
8. Mikhailova A.A. Computer diagnostics and auriculotherapy in clinical practice. - M.: LLC "Medical Information Agency", 2006. - 208 p.
9. Mkrtchyan V.R. Secondary cardiomyopathies of disovarial genesis: features of pathogenesis, diagnosis and treatment: author. dis. Dr. medits. Sciences / MGMSU - M. - 2008. - P.17-21.
10. Prilepskaya V.N., Tsareva N.V. Menopause: Opportunities for Substitution hormone therapy // Russian med. zhur. - T.6. - No. 8. - 2005. - P.501-504.
11. Guide to menopause / Ed. V.P. Smetnik, V.I. Kulakov. - M.: MIA, 2001. -- 685 p.
12. Ryss E.S. Gastroesophageal reflux disease. - World of Medicine. 1998. - No. 6. - pp. 32-77.
13. Sergeev P.V., Shimanovsky N.A. Physiologically active receptors

substances. - M.: Medicine, 1987. -- 207 p.

14. Fisenko L.A. Acupuncture in clinical practice. - M., 1993.-
pp. 78-93.

15. Yarotskaya E.P., Fedorenko N.A., Naryzhnaya E.V. Traditional oriental
the medicine. - M.: Ast, Torsing, 2005. -- 382 p.

16. Yaroshevsky A.A., Morozova O.G. Musculoskeletal pain in the area
chest as an interdisciplinary problem, newspaper "News of Medicine and
Pharmacy", neurology (thematic issue), 2012. - No. 405.

17. Blumencron B., Zellhofer K. Handbuch der Sanften Medizin \\ Wien, Austria,
2003, p. 56-69.

18. Samsioe G. Medical and surgical Strategies for treating urogynecological
disorders // Int. J. Fertil. - 1996. - V. 2, 41 (2). - P. 136-141.

19. Stuenkel CA Perimenopause // Curr Ther. Endocrinol. Metab. - 1997. - N6. -
P.270-274.

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S.26-30.

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