



FEATURE OF CLINICAL, NEUROLOGICAL AND DIAGNOSTIC SIGNS OF CARPAL TUNNEL SYNDROME IN PREGNANT WOMEN

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Annotation:

The consequence of a static load on the same muscle group in the wrist ultimately leads to the so-called tunnel syndrome. Namely, carpal tunnel syndrome is the most frequent accompanying moment in people of a number of professions, musicians, computer scientists (working with a mouse), people doing manual labor. This category of patients includes pregnant women for the period of the third trimester. According to statistics carried out in recent decades, tunnel syndrome occurs in 4% of the population, and out of 20% of the younger generation, the development of the syndrome occurs in women.

Key words:

Carpal tunnel syndrome, VAS scale, MRI, EPS.

The cause of tunnel syndrome in women during pregnancy is usually associated with water retention in the body, which can cause swelling of the extremities as a result of an increase in soft tissue volume and compression of the middle nerve (3, 7). In 1854, Paget described carpal tunnel syndrome after a fracture of the radius, pathologically fused with the formation of callus, since that period the problem has not lost its relevance (3, 4, 5). An important role in the development of the syndrome is played by a hereditary predisposition, while the transverse wrist ligament is increased in thickness, or the anteroposterior size of the wrist is increased in relation to the medial-lateral side with the presence of a "square wrist". That is, the importance of anthropometry in patients, determination of the cross-section of the carpal tunnel, remains relevant during the examination period.

Scientific research in recent years has drawn attention to the transition from an acute, rapid stage to a chronic form. Taking into account the modified risk factors of the disease, according to the literature, separate clinical symptoms of the disease are distinguished (1, 2, 6). In the foreground, sensory disturbances appear, intensifying at night; further motor changes join; vegetative disorders have a place in this disease, but very little importance is attached to these signs. The main, undeniable sign of tunnel syndrome (TS), of course, is pain.

The totality of all clinical signs of TS requires confirmation and standard diagnostics of electrophysiological studies (EPS) comes to the rescue. Many diagnostic methods have been developed for the early diagnosis of TS, these are certain tests, the results of which are important for the effectiveness of therapy for carpal tunnel syndrome. The canal itself is a passageway from the

forearm to the hand, the median nerve, and the flexor tendons, providing finger sensitivity and muscle control. An important point of the syndrome, it can exist subclinically for a long time before the appearance of clinical signs, gradually deforming the destruction of cartilage, bone and adjacent extra-articular organs.

The authors of scientific studies draw attention to the fact that such symptoms mimic joint pain. An essential role in differential diagnosis and determination of treatment tactics is assigned to ultrasound examination (9, 10).

Goal.

To study the clinical diagnostic criteria in pregnant women with carpal tunnel syndromes.

Material and research methods.

The survey covered 22 women, aged 25-35 years. The surveyed women were divided into groups, group 1 is pregnant women of 10 people, group 2 (12) who did not have pregnancy, but who had given birth earlier. All examined women had signs of tunnel syndrome. The examination was carried out on the basis of 1 Clinic of SamMI(Samarkand Medical Institute)in the obstetric department (department of pathology of pregnant women) and the department of neurology. The patients underwent a standard neurological examination, examination by an obstetrician-gynecologist, a therapist. Laboratory studies included analysis of biochemistry of blood, urine, and if necessary, blood for rheumatic test, brucellosis, TORCH infection. From additional studies, ultrasound and electromyographic study were irreplaceable; in some cases, an MRI(Magnetic resonance imaging) study was performed in women of group 2. The definition of pain was assessed using the VAS(visual analogy scale). Statistical data were studied on an individual computer.

Research results.

A survey of 22 women, aged 25 to 35 years, 10 women were included in group 1, women were pregnant, gestation period 2 from 32 weeks to 40 weeks; Group 2 included women who were not pregnant 12. All women suffered from pain in the wrist area. In addition, complaints of weakness, awkwardness, numbness of the first 3 fingers. The pain was of a constant aching character, in 5 women of the 2nd group the pain was paroxysmal, the provoking factors were the load on the hand (housework). Most often, women fought the pain on their own, rubbing the painful area, "shaking" the brush, bandaging it with a warming compress. Women noted a change in the color of the skin on the side of the affected wrist. Pain in three patients from group 1 and two from group 2 radiated to the palm or periodically to the forearm. Important when describing complaints, signs of swelling. This was most pronounced in patients of group 1 (pregnant women); the patient's disease itself was associated with general edema in the last trimester. Clear cuts and paralysis in the patients were not detected during the examination, mainly movement disorders, the examined women, were associated with numbness, stiffness and fear (that when holding an object, an attack of pain would occur), therefore, motor disorders are the result of awkward holding of household items, difficulty in food intake (if it concerned a working, active brush).

In patients of group 1, the disease began most often gradually, with an increase in the first signs with a feeling of "tingling", in the late afternoon, then the pain - dull, intolerable. In group 2, in 3 patients, pain was localized in the fingers and tenar, had the character of joint aches, in a more thorough survey and examination of these patients, the involvement in rheumatism is obvious. Accordingly, the examination showed that in women in 90% of cases the hand has a decrease in pain, tactile sensitivity, swelling of the hand and fingers, in 100% in patients of group 1, in 50% in women of group 2, a change in skin color (redness, blueness, pallor) , 27%, all women noted brittle nails, dry skin 20%. The assessment of pain syndrome according to the visual analogue scale (VAS) when included in the study ranged from 0 to 10, in the range of 5-6 points on average. In

accordance with the task, the patients underwent additional diagnostics, ultrasound duplex scanning.

The results of the study revealed carpal tunnel syndrome with right-sided lesions in 30% of cases, 25% left-sided, bilateral 45% of cases (of the total number of women examined, and these were mainly women of group 1). The usual control, the most significant standard finding, is the cross-sectional area at the level of the pisiformis. The surveyed women of group 1 noted thickening of the middle nerve more than 0.10 cm², in 65% of cases. In group 2, thickening of this nerve is 0.12 cm², with a decrease in echogenicity and longitudinal scanning plane, in 90% of cases. A decrease in nerve thickness at the level of the proximal edge was determined in 30% of women in group 1, and 70% in group 2. If we talk about neurophysiological data (EPS), then the increase in the residual latency figures, reaching 4.5 ms, matters. The second, no less important sign of TS in the surveyed women is a change in conductivity along sensory fibers in the form of a change in the amplitude and speed of excitation propagation. The size of the transverse nerve on the affected side at the level of the carpal canal increased, especially in women of the group, where carpal tunnel syndrome was expressed by clinical and ultrasound signs.

But the size from the anterior contour to the posterior contour decreases, due to flattening and compression of the nerve, it reaches 1-2 mm. Again, a pronounced feature in women of group 2. Magnetic resonance imaging was performed in patients of group 2 to exclude bone deformity and differentiation with other diseases.

Thus, according to the literature, confirming the data of our study, the frequency of carpal tunnel syndrome is 10 times higher in women than in men. The factor, which is the anatomical structure of the canal itself (initially narrow). Concomitant factors, pregnancy, in accordance with our research, due to tissue edema in the second half of pregnancy (histosis, during which general swelling of women is noted; excess weight; metabolic changes). In group 2 (non-pregnant women), the reasons for the development of the syndrome were hand injuries (stretching during training, in the fitness room, one woman obstetrician-gynecologist was injured while removing the fetus from a woman in labor), 3 patients take oral contraception for a long time (with a therapeutic purpose, which is also causes swelling of soft tissue), almost all women were overweight, short (typical for Asian women), a description of clinical signs and detailed diagnosis, confirmed the rheumatoid genesis of the disease as one of the factors of carpal tunnel syndrome, judging by only 1 patient of group 2 a history of hereditary predisposition to the disease.

Conclusion.

1. The causes of carpal tunnel syndrome in pregnant women are edema associated with late gestosis and most often it is a bilateral disorder, with severe sensory-vegetative symptoms and complete regression after childbirth.
2. Diagnosis of carpal tunnel syndrome is important for a differentiated approach to treatment and the study of neuropathic nature, for this it is necessary to use ultrasound and electroneuromyographic diagnostics.

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