

Correction of emotional-energy imbalance in regional postural muscle imbalance in patients with infantile cerebral palsy

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Most of the clinical forms of cerebral palsy are based on pathological tonic muscle reactions, impaired coordination of voluntary movements, the gradual development of contractures and deformities of the extremities, and the formation of pathological motor stereotypes in the late residual period.

Despite the long history of existence, the problem of rehabilitation therapy for cerebral palsy continues to be relevant. The complexity of the pathogenesis, the severity of clinical manifestations associated with the degree of the motor defect, is the reason for the relatively low effectiveness of the applied therapeutic measures, severe disability and gross social maladjustment of this group of patients, especially in the late residual period.

In recent years, there has been an increased interest in non-drug methods of exposure due to significant allergization of the population, the occurrence of negative pharmacogenetic effects, environmental and economic reasons. The development of new approaches to non-drug effects in cerebral palsy is one of the most important in this problem. In the literature there are a significant number of publications indicating the effectiveness of the application of methods of oriental medicine, endogenous wave therapy and homotoxicology in cerebral palsy. Currently, the method of reflexology (acupressure) is widely used, which is characterized by practical harmlessness, the ability to supplement and (or) replace other, in particular pharmacological, treatment methods that improve tissue microcirculation, stimulating trophic and regenerative processes due to the inclusion of segmental and suprasegmental regulatory mechanisms. In other words, the effectiveness of treatment increases with the activation of sanogenetic mechanisms aimed at arresting the pathological process. The influence of emotions as a nonspecific disorder, which is a combination of symptoms caused by disorders of the mechanisms of autonomic regulation, is described in a fragmentary manner.

The ability of emotions to trigger the mechanism of immune disorders is well known in modern medicine. The trigger function of emotions is especially pronounced in the etiology of psychosomatic diseases, when there is a psycho-neuro-endocrine-immunological (PNEI) complex. The main neurotransmitters of the central nervous system are serotonin, adrenaline, dopamine, and glutamic acid. Under the influence of stress and emotional tension, serotonin and adrenaline are most actively secreted. Both low and high serotonin levels can cause problem conditions. For example, a concentration that is too low or too high can cause the same symptom: cramping. As I said else

centuries ago Paracelsus: "Toxicity determines the dose." Emotional stress through the PNEI system can cause changes in serotonin levels and induce spasms. Stress-related anxiety increases the intensity of the spasms.

Emotion is a specific signal that we consider "pleasant" or "unpleasant". Emotions are chosen unconsciously, as our response to certain stresses associated with our past. As soon as new sensations arouse old emotions, we fall under their control and stop managing ourselves and our lives. Unconscious emotions are called emotional blocks, of which chains are often formed, when one, older block, is the basis for the previous one. Each of the emotional blocks corresponds to the colors of plants discovered by the English physician E. Bach in the 30s of the twentieth century. In total, he found 38 plant flowers in nature, later named 38 flower-healers E. Bach. Each flower has a corresponding emotion. E. Bach made infusions of flowers and offered to take them to people in different states of mind. In the resonance test, the principle of using Bach colors was transformed. The earliest emotional block is important, because the subsequent ones are formed against its background. This emotional block is called primary emotion. Primary emotion is an emotional state that is not realized by a person, but a person lives in it and reacts to the outside world (external stimuli). Reacts automatically. Not being able to be aware of their emotions, a person can fall into a vicious circle of negative emotions and thoughts. An emotion that is not recognized is reflected in the connective tissue (extracellular matrix) in the form of gelosis, changes in the extracellular matrix in the form of palpable nodular formations to embossed ones, and myelogenesis develops as it progresses. Ultimately, this leads to illness. Practically, primary emotion is determined using a resonance test according to a specific protocol. Emotion emerges from the shadow of the unconscious. The recognized primary emotion that has emerged from the shadows into the light loses its strength, emotional charge and loses its relevance.

The Emotional Balance technique helps to identify and become aware of the primary emotions that manifest unconsciously and block us. At the same time, personal flotation therapy is carried out, which helps to cope with these emotions. The effect of the technique is greatly enhanced by the activation of certain acupuncture points. There are certain points on the meridians and by acting on them, one can influence the level and quality of energy in the meridians and associated organs. Each meridian responds to a specific organ and vice versa. By treating certain points, we neutralize the psychoenergetic memory at the cellular level, which creates a certain negative emotion.

Purpose of the work: study of emotional and energy imbalance in regional postural muscle imbalance in patients with infantile cerebral palsy and the development on this basis of a program for the differentiated use of acupuncture in a complex of therapeutic and rehabilitation measures.

An algorithm has been developed for practicing physicians, its adequacy and effectiveness have been proved for regional postural muscle imbalance in patients with infantile cerebral palsy, as a method of pathogenetic therapy and rehabilitation. The possibilities of electropunctural diagnostics by the method of R. Voll and segmental bioelectronic functional diagnostics for objectifying the effectiveness of treatment and rehabilitation measures are shown.

Practical significance. Isolation and description of emotional energy imbalance in regional postural muscle imbalance in patients with infantile cerebral palsy complements the knowledge about its clinical manifestations. The inclusion of kinesiological resonance diagnostics in the diagnostic complex for infantile cerebral palsy has been substantiated.

A pathogenetically directed algorithm for the use of natural drugs with ultra-low doses for the treatment of disturbed emotional background has been developed. One of the proposed groups of drugs are preparations of flower essences by E. Bach. In the course of the study, the following methods were used: clinical neurological, vertebroneurological, manual testing, segmental bioelectronic functional diagnostics and autonomic resonance test, implemented at the IMEDIS-EXPERT APK. The tone and reactivity of the autonomic nervous system were determined in all patients.

Key points:

1. A characteristic reaction with regional postural muscle imbalance in patients with cerebral palsy is the development of an energy imbalance in the form of multidirectional changes.

2. An individually differentiated program of regulation of emotionally energy balance and acupressure is a targeted, pathogenetically substantiated method of treatment for regional postural muscle imbalance in patients with infantile cerebral palsy, leading to a decrease in myodystrophic changes and normalization of tone in the muscles of the musculoskeletal system, and restoration of the range of motion in the limbs.

Materials and research methods

To solve the set tasks, 190 patients with infantile cerebral palsy (138 boys and 52 girls) were examined: 130 of them made up the main group, in which, along with acupressure, emotional and energetic correction was carried out, and 60 - the control group, where acupressure was carried out according to standard prescriptions.

Comparison of results clinical and radiological and vertebro-neurological examination showed the identity of the main and control groups, which indicates their representativeness and the competence of comparing the results of the use of standard and individual differentiated complexes of treatment and rehabilitation measures. By sex, age, main characteristics of the disease, the impact of biomedical and socio-hygienic factors, the main and control groups also did not differ significantly. The largest number of patients (49.2%) was between 1 and 6 years old. The average age of patients in the main and control

groups was 3 years ($p > 0.05$).

When forming the groups, the requirements were observed to ensure their representativeness, and when analyzing the materials - a double-blind method for assessing the results of diagnosis and treatment in the compared groups.

Research results and their discussion

Characteristics of clinical changes in regional postural muscle imbalance in patients with infantile cerebral palsy. Taking into account the goal and objectives of our work, we carried out a multifaceted distribution of patients (main and control groups) based on the most characteristic syndromes, substantiated by the results of clinical instrumental and X-ray examination.

Depending on the clinical manifestations, all patients were divided into 5 groups or forms (according to the classification of K.A. Semenova, 1980). Spastic diplegia was diagnosed in 19.9% of children, double hemiplegia - in 40.7%, hyperkinetic form - in 13.3%, atonic-astatic - in 7.6% and hemiparetic - in 18.4%.

In the process of manual testing, pathobiomechanical changes were found in all patients, which had features depending on the form of the disease and age. All children with cerebral palsy had a regional postural muscle imbalance (RPMD). In most cases, postural disorder was diagnosed in the form of grade 1–2 scoliosis: in the thoracic spine in 70.7% of cases; in the lumbar - 10.1%. Most often, the direction of scoliosis was noted in the opposite direction from paresis and was more pronounced in hemiparetic form (82.7%). In other forms, the frequency of scoliosis ranged from 58.3 to 70.9%. In the hyperkinetic form, the direction of scoliosis depended on the pathology of the pelvic bones (functional block of the sacroiliac joint, RPDM of the pelvis:

RPDM of the pelvis "oblique" or "twisted" was determined in 78.5% of children. The causes of RPDM were the functional block of the sacro-vertebral articulation, shortening of one of the lower extremities by at least 0.5 cm, RPDM of the lumbar spine and pelvic region (shortening of the iliopsoas muscle, square psoas muscle, lumbar extensors, hip flexors with one side).

In children with all forms of RPDM, myofascial trigger points were determined in the altered muscles. Up to 7 years old, these points were latent and were determined only by palpation. In this group, they were in the nature of painful muscle tension and captured the entire abdomen of the muscles. Trigger points in all children were determined in the muscles of the affected limbs, the muscles of the back (more in the upper and middle portions of the trapezius muscle, the muscle lifting the scapula, in the rectus muscles of the back, and the quadratus lumbar muscle). A change in muscle tone by the type of spasticity and rigidity was the main cause of impaired movement and the development of contractures of varying degrees with limitation of active and passive movements in the shoulder, elbow,

wrist, carpal-metacarpal, metacarpophalangeal, hip, knee and ankle joints.

Non-optimal motor stereotype was revealed in all patients with cerebral palsy.

Thus, the identified regional postural muscle imbalance in various forms of cerebral palsy plays an important role in the development of the disease and requires correction.

Analysis of the results of acupuncture and electroacupuncture segmental bifunctional diagnostics revealed characteristic bioenergetic disorders. The common syndromes of energy imbalance were YANG and YIN syndromes, which reflected the activity of the pathological process. Yin syndrome was encountered 2 times more often than Yang syndrome. In addition, we identified the YANG – YIN transition syndrome, which occurred 2 times less often than the Yang syndrome and 4 times less often than the YIN syndrome. Energy imbalance was detected in all channels. The most frequently affected channels were R, V, F, P (61.2–96.3%); in channels E, RP, MC, TR, VB, an imbalance was found in half of the patients. Channels GI, C, IG suffered less often than others (20.0–32.5%). The frequency of redundancy was more common in channels P, GI, IG, V, MC, VB, F ($p < 0.05$), and the frequency of insufficiency - in channel V. In channels E, RP, C, the frequency of redundancy and insufficiency syndromes was the same ($p > 0.05$).

All patients examined by us received a differentiated complex of treatment and rehabilitation measures. Patients in both groups received the same treatment package. Reflexotherapy was performed in all patients in both groups. The difference was that in the main group the emotional balance program was drawn up on the basis of the results of the resonance kinesiological test and was aimed at correcting the revealed emotional-energy imbalance, and in the control group it was carried out according to standard reflexotherapy recipes.

results

To assess the effectiveness of the course use of reflexology for regional postural muscle imbalance in patients with infantile cerebral palsy, we analyzed the immediate results in the main and control groups, as well as long-term results according to the follow-up data. In total, the patients underwent 3-4 courses of acupuncture. One course was received by all patients, two courses - 85.4%, three courses - 40.0% and more than three - 8.0%.

The effectiveness of treatment and rehabilitation measures in the main group was significantly higher than in the control group. In the main group, a significant improvement was achieved in 27.5% of patients and an improvement in 60.0%.

In the control group, the total effect of "significant improvement" and

"Improvement" was 40.0%, and a significant improvement was achieved only in 7.5% of patients, which is 3.6 times less frequent than in the main group ($p < 0.05$).

It should be noted the positive effect of the treatment on the general condition of patients (improvement of motor activity, sleep, appetite, etc.), and on regional postural muscle imbalance (RPM). After the course of therapy, a partial correction of RPMD was revealed. After the course of treatment, RPDM was not detected in 57.5% of patients in the main group and in 34.5% of the control group ($p < 0.05$). Against the background of improved muscle relationships, hyperkinesia decreased noticeably, and gait improved.

A thorough neurological and manual examination of patients during treatment showed that in most of them, after the first course of therapy, there is a significant decrease in the tone of the affected muscles. Confirmation of the observations made is an increase in the angle of extension in the hip joints, a decrease in the degree of crossing of the lower extremities, an increase in dorsiflexion of the feet, an increase in the range of motion, a decrease in mental and autonomic disorders. Children began to chew solid food better, drooling significantly decreased or disappeared, speech became clearer, the severity of pseudobulbar paralysis manifestations decreased in 24 out of 63 patients. Positive changes in mental status occurred in 31 out of 110 patients.

In the study of patients in the control group, significant changes after the 1st course of treatment were not determined.

Observation of the dynamics of the patients of the main group showed that the effect after the treatment was persistently maintained for 6–12 months, especially in cases of physical therapy between courses of treatment, which was not observed in the control group. Positive dynamics after the course of treatment was also noted during the examination by the method of segmental bioelectronic functional diagnostics.

Thus, the analysis of the results of the study of regional postural muscle imbalance in patients with infantile cerebral palsy under the influence of an individually differentiated program of emotional and energy balance and acupressure indicates a positive dynamics of pathobiomechanical changes, a tendency towards normalization of the general center of gravity in projection onto the plane of support, indicators of energy intensity and electrical conductivity. at the acupuncture points studied by the method of segmental bioelectronic functional diagnostics, and testifies to the adequacy of this method in the complex of therapeutic and rehabilitation measures for infantile cerebral palsy.

Inclusion in program treatment and rehabilitation activities
reflexology programs emotional balance at regional
postural muscle imbalance in patients with infantile cerebral palsy promotes the
stimulation of restorative and compensatory sanogenetic mechanisms, which
ensures the normalization of muscle tone, the rapid development of motor skills
and the sustainability of positive results.

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