

Dia-DENS ACUPUNCTURE COMPLEX TREATMENT OF IATROGENIC PERIPHERAL TRAUMATIC NEURITIS OF FACIAL NERVE

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Study objectives is to study results of Dia-DENS for patients with peripheral traumatic neuritis of facial nerve in the earlier terms according to the quantitative clinic indices of the functional test.

Methods and material. We examined 36 patients went for the medical secondary care one or two months after the facial nerve injury. They were divided into two groups.

Group 1 consisted of 18 patients received standard treatment and rehabilitation course. Group 2 included 18 patients. They had complex treatment and rehabilitations procedures (standard treatment combined with Dia-DENS). Group of control consisted of 10 healthy peoples.

The functional tests were performed when patients went for the secondary care and write after the rehabilitation treatment.

During patients examination we marked:

- 1) mimic muscles are disordered;
- 2) face configuration in dormant state and when patient try to do some mimic movements is different from its normal configuration (we observed displacement to the healthy part of face due to the its pull of muscle).

Dia-DENS therapy was made on the skin projection of acupoints with Dia-DENS device.

Results. Dia-DENS of traumatic neuritis of facial nerve is aimed to: anti-inflammatory action, decongestion and to relieve nerve trunk swelling, sensitizing effects achievement, increase of human common resistance, activation adaptive and compensatory reactions, the most total rehabilitation of lost neuromotor function of mimic muscles in order to obtain good aesthetic results. Dia-DENS of traumatic neuritis of facial nerve as well as of other pathological process, has many levels structure and is based on three main levels of treatment response.

First level response is local, it is direct mechanism of acupuncture. Dia-DENS acupuncture needle piercing the skin and hypodermic tissues, influences on the sensitive nerve fibres of all pierced histoblasts what increases local microcirculation and intensify metabolism processes. When needling, irritated sells generate biologically active substance which has stimulating effects on the involved organs named «target». It improves mimic muscles blood supply, decreases manifestation sensation of pain and contributes to the return of sensation and restoration of vegetovascular reactions.

Second level response is segmental and realized with the help of efferent pathway. Reaction due to efferent impulses transmission to the centers, cells of the spinal cord or ganglia cells of sympathetic chain, is characterized by change of functional state organs named «target» which are subject of acupuncture stimulation. In our case we speak about mimic muscles of the face.

Third level response is common. It is forming when impulses enter from the peripheral parts into corticosubcortical parts of the CNS (central nervous system) and regulatory formation, as well as when irritation is spread by sympathetic chain or neurovascular plexus located outside of the segments. Positive reaction generated in this way helps for homeostasis normalization of the human body in total and of the organs, tissues functioning particularly. It appears in the process of examination as restoration of neuromotor function of mimic muscles, pain relief, overcoming of sensibility disorder and vegetovascular changes in maxillofacial area. As a result, functional and aesthetic abnormalities provoked by traumatic neuritis of facial nerve are eliminated at most.

Obviously, second and third levels responds are to be considered as mediate reaction on the acupuncture treatment. So, direct and mediate mechanisms of acupuncture on the mimic muscles of the face has three mentioned above points. Is to pay attention that second and third levels response predominates at the beginning of the treatment course (mediate response). In the restoration and some normalization of the neuromotor function mimic muscles of the face, direct effects of Dia-DENS (first level response) become significant. Described above mechanism is typical for all types and techniques of Dia-DENS acupuncture for patient's treatment with traumatic neuritis of the facial nerve.

So, patients of the 1 group underwent standard treatment course based on the medical preparations application which influence to the facial nerve is to recover its functions. All pharmaceuticals have adverse reactions and contraindications for application. On the other hand, medical preparations have fully directed mechanism of action which activate several organs, systems and never activate all levels of action on the whole human organism. Additional methods applied together with pharmacological treatment make part of complex treatment and rehabilitation. They have one aim – to effect on the facial nerve. At the same time, neither main method nor additional methods treatment, do not take into consideration the main source – human body itself. The whole body, not its some organs or systems are subject of influence during the treatment. They can obtain quick first positive changes of clinic-functional indices of organ or system named «target» when using strong and high-speed action medical preparations. Certainly, this is most direct but not most effective method.

Patients of the 2 group were subjected to the complex treatment and rehabilitation course combined with Dia-DENS. Patient's treatment, his disease examination, therapy course were different to those in the 1 group. First of all, regardless of strong and high-speed action medical preparations application, sufficient quantity of additional treatment and rehabilitation procedures, Dia-DENS made one of the main parts of complex treatment. Second, patient was object of treatment and not facial nerve or peripheral nervous system. Third, treatment was performed according to the individual patient's characteristics but general rules and principles of treatment, rehabilitation and Dia-DENS were also kept. Fourthly, results of examinations we have spoke already, showed harmonious Dia-DENS effects which could realize homeostatically correct use of medical preparations by human body himself. That's why organism regulated and corrected

medical preparations application for the patients of the 2 group due to its adaptive and compensatory systems functioning what is confirmed by other researchers. Thus, medical preparations effects were efficient and favorable, without concurrent reaction, complications. Dia-DENS let to smooth adverse reactions of the pharmaceuticals applied. So, due to the multi-level mechanisms, except direct therapeutic action by means of adaptive and compensatory systems of the organism, Dia-DENS mechanisms coordinate all methods and preparations action during treatment and rehabilitation. That process effects have multistructure and need some more time than direct mechanisms of pharmaceutical actions what we observed when functional tests indices and visual estimates of the groups 1 and 2 were compared. Late results of the 2 group at the beginning of the treatment achieved the indices level of the 1 group and exceeded them for many times. This is due to Dia-DENS effects which stimulate adaptive and compensatory mechanisms of the organism and make there functioning in the future without Dia-DENS. We named this process the phenomenon of «introduction into the memory» or cumulative capacity of Dia-DENS which provides homeostatic action during and after the treatment course right up to the recovery neuromotor function of mimic muscles. So, introduction of Dia-DENS in the complex and rehabilitation treatment for the patients of the 2 group allowed obtaining not only good functional but satisfactory aesthetic results.

All this is confirmed by significantly less quantity of complications in the patients underwent complex treatment and rehabilitation included standard and Dia-DENS.

Conclusion. Dia-DENS in complex treatment for patients with peripheral traumatic neuritis of facial nerve can greatly improve functional, aesthetic results and reduce number of complications on 47%. This type is noninvasive what is advantage.