

TRANSVERTEBRAL MICROPOLARIZATION IN THE COMPLEX TREATING OF THE SPINAL DISORDERS: CLINIC EFFECTIVENESS

Greshnova I

Regional Hospital of Ulyanovsk, Ulyanovsk, Russia (1)

Micropolarization is the new treating method using direct current and high selectivity of influence.

The aim of this research is: the investigation of the transvertebral micropolarization (TVMP) effectiveness as treating method, its utilization in complex treating of chronic spinal pathology (spinal trauma, ischemic mielopathy, syringomyelia). Similar processes are wide expanded, are badly subjected to traditional therapy and lower the level of patients life. Under the spinal pathology the disturbances of supraspinal control of nerve cells functional state below the injury level is observed and micropolarization permits to restore functional connections lost in the result of pathologic process.

Electromiographic characteristics: latency, duration and amplitude of H-response under the stimulation of n. tibialis served as criterion of TVMP effectiveness. Firstly these parameters were investigated in healthy peoples before and after TVMP under different electrodes localization (4 volunteers: anode in projection of C3 vertebrae, cathode-C5; 4 - opposite localization).

Under the rostral anode localization parameters of H-response changed: latency and duration increased, amplitude decreased, H-response was depressed by the less current strength. These changes evidence about decreasing of neurons excitability. Under the rostral cathode amplitude increased, H-response was depressed by the more current strength. This indicates the increasing of lumbar enlargement motoneurons excitability under TVMP of cervical part of the spinal cord.

Secondly we used TVMP in complex treating of patients. Before and after TVMP neurologic status and H-response parameters were studied. TVMP resulted in positive influence: vegetative disturbances and paresthesia became diminished, pathological muscle tonus decreased. After TVMP course it was observed the appearance of H-response under the lower current amplitude, enlargement of its amplitude and decreasing of latency. It was proved the effectiveness of TVMP in the norm and pathology