

3. Among psychiatric disorders, aggressive (agitated) behavior was the most common, occurring in 23.5% of all patients. Of all patients, only 15.6% (8 people) were at the time of hospitalization or were subsequently taken for outpatient observation in the psychiatric hospital of the Republic of Sakha (Yakutia) and regularly received medication correction of mental disorders.

4. No clinically significant depression was detected among the patients, which was due to the fact that most patients were admitted with a moderate to severe degree of dementia.

5. In case of early manifestations of cognitive disorders at the outpatient level, it is necessary to refer to the department of YSC CMP, in order to make an early diagnosis, to select appropriate therapy to suspend the progression of these diseases, to prolong patients' independence. If marked psychotic and

behavioral disorders are detected, refer for treatment to psychiatrist at the regional psychiatric hospital of the Republic of Sakha (Yakutia).

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A CASE FROM PRACTICE

DOI 10.25789/YMJ.2022.78.32

УДК 616-009.3

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BOTULINUM THERAPY FOR WRITING SPASM

The article presents a clinical case of a writing spasm, examines the clinical features of this disease at the present stage, and also provides modern methods of treatment that facilitate the patient's condition and quality of life.

Keywords: dystonia, hyperkinesis, botulinum therapy, botulinum toxin type A, focal dystonia, writing spasm, dyskinesia.

Introduction. Writing spasm is a type of focal dystonia characterized by a violation of the motor skills of the leading hand, in view of which the act of writing and small movements of the brush are greatly hindered or become impossible. It was first described by Bernardino Ramazzini in 1713 and was called the "scribal disease" manifested by pronounced fatigue of the hand when writing.

This disease affects not only those who write long and fast, it can also occur in musicians, machinists, programmers. It occurs equally in both men and women. The main characteristic of the writing spasm is the gradual development, often

patients do not notice the appearance of the first symptoms, the disease initially manifests itself with slight changes in handwriting, a feeling of awkwardness when performing small movements of the brush, symptoms disappear after the termination of writing, changing position or shaking the hand. Then gradually the handwriting becomes rough, the movements become sharp and difficult to control, a pronounced kinetic tremor appears, and twisting of the brush can also be observed. Patients use corrective gestures, thereby reducing hyperkinesis. And they can also feel relief when changing the position of the hand when writing, using pens of certain shapes or changing the angle of inclination [7].

When this disease occurs, many factors precede it. First of all, it should be noted the nature of the work - as previously mentioned, musicians, programmers and professions related to writing mostly suffer. The monotony of actions against the background of emotional tension has a special effect. There are also a

number of other reasons—features of the shoulder muscles, scoliosis, mental injuries, personal characteristics [3].

According to the Govers classification, writing spasm is divided into 4 types: convulsive – characterized by hypertonicity in the muscles of the hand, a feeling of heaviness and awkwardness of the hand. Paretic - sharp weakness in the muscles of the hand when writing. Tremor – tremor in the working hand. Neural – accompanied by pain during work [3].

It is noteworthy that with palpation, the muscles of the hands of normal consistency are painless. Patients are completely free to perform other motor acts. Further, these properties are gradually lost and other motor functions that require a high level of coordination of movements begin to suffer.

Diagnostics. In addition to a thorough neurological examination, it is necessary to test the letter - the quality of the handwriting, the speed of writing, the presence of corrective gestures are evaluated. You should also consult a psychiatrist

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to exclude mental disorders, borderline character traits. ENMG assessment of the regulation of muscle tone of the forearm. MRI of the brain to exclude organic intracranial pathology (encephalitis, brain tumors) [4].

Differential diagnosis is carried out between muscle diseases (myotonia, myopathy), ulnar nerve damage, carpal tunnel syndrome, vertebrogenic pathology (radicular syndrome, intervertebral hernia). They also differentiate between primary and secondary dyskinesia. Primary dyskinesia means professional neurosis thus the collection of anamnesis should include clarification of the nature of the work. And under secondary – a possible debut of torsion dystonia, that is, a hereditary history should be taken into account [3].

Treatment. The drugs of choice are muscle relaxants, benzodiazepine derivatives, adrenoblockers. But often, due to the lack of a quick effect, patients independently interrupt taking medications, and also stop due to side effects. The fastest and most promising method of treatment to provide real help to patients with writing spasm are injections of botulinum toxin type A, which relaxes the muscles leads to a decrease in dyskinesia [6].

Here is a description of a clinical observation of a patient with successful treatment of a writing spasm with botulinum therapy type A in the clinic of the YSC CMP.

Female, 58 years old. She turned to the neurological department of the YANC KMP with complaints of trembling, handwriting changes, tightening of the muscles of the right hand when writing and performing small movements.

Anamnesis of the disease: 4 years ago, after physical exertion, I noticed a restriction of movement in my right arm, pain in the right shoulder area. After 2 years, the trembling in the right hand began to bother me when writing, the handwriting changed a lot. At first, the patient controlled the tremor by a certain hand position when writing, regular massage and shaking the brush when writing. Gradually, the trembling began to bother when performing certain actions, such as typing in a phone, controlling a computer mouse, holding devices (forks, knives). According to the appointment of a neurologist, I took muscle relaxants, but I did not notice any effect. The occurrence of the above symptoms is associated with work (working as a teacher), as well as with a stressful load at work.

In neurological status: Tone in the hands according to the type of gear

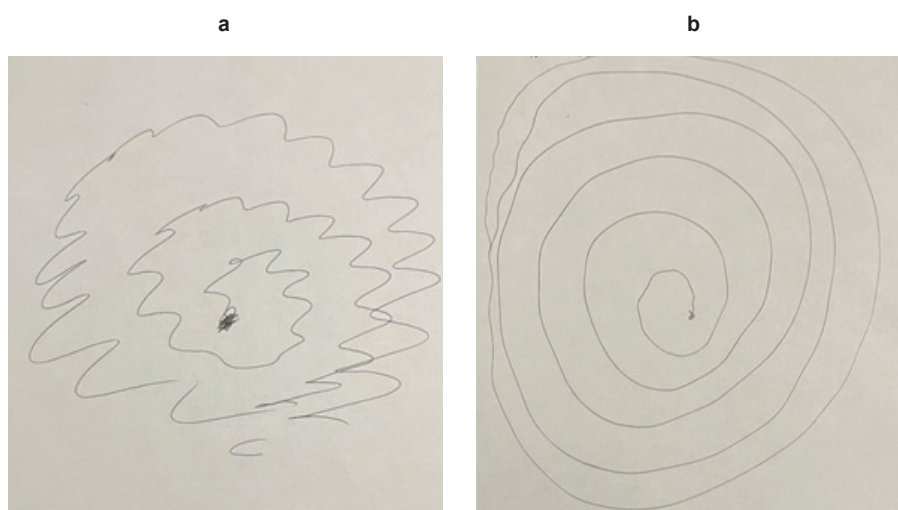


Fig. 1. Drawing the "Archimedes spiral" before the treatment: a - with the right hand, b - with the left

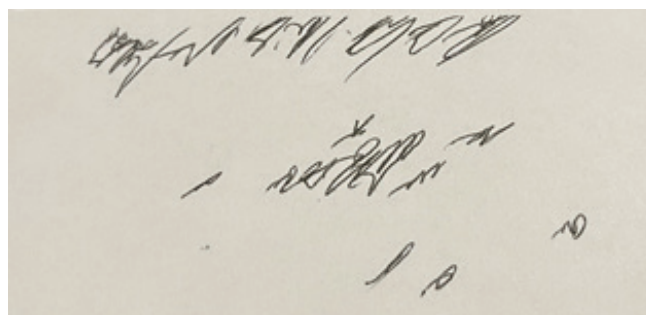


Fig. 2. The patient's handwriting

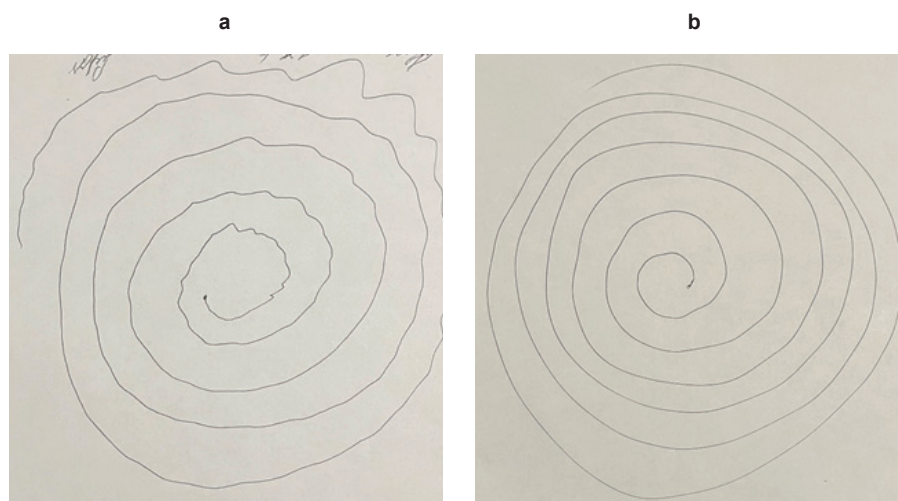


Fig. 3. The result of the test of drawing the "Archimedes spiral" after the treatment: a - with the right hand; b - with the left

wheel with multidirectional actions. Muscle strength in the extremities - 4.5 points. Reflexes from the hands with biceps D = S are alive, from the triceps are reduced, carporadial are reduced, the finger test is performed with the intention of more on the right. Kinetic tremor of the right upper limb, manifested when writing, eating. Otherwise, no pathological changes were detected.

MRI of the brain Conclusion: - few foci of the large hemispheres, most likely, of a vasogenic-glycemic nature; - unexpressed uneven swelling of the mucous membrane of the maxillary sinuses, cells of the lattice labyrinth without exudation, single cysts of the right maxillary sinus. There are no arteriovenous malformations, aneurysmal dilation, pathological stenotic narrowing of the intra-

cranial arteries. - decreased blood flow along the transverse and sigmoid sinuses, the initial sections of the internal jugular vein on the left against the background of hypoplasia. Психиатр при осмотре патологический изменений не выявил.

The patient was prescribed Sirdalud 4 mg per day, Anaprilin 60 mg per day, and botulinum therapy is also recommended.

Botulinum therapy was performed in the spastic muscles of the right forearm with botulinum toxin type A at a dose of 90 units.

Repeated results of letter testing are presented. The test was performed 7 days after botulinum therapy.

The test results clearly show that botulinum injections had a significant positive effect on the quality of writing. Also, the patient herself notes that the feeling of spasm and pain in the muscles of the right upper limb has significantly decreased. It became better to hold devices when eating, write texts in a mobile device.

Conclusion. Thus, on the example of the described clinical case, it should be assumed that botulinum therapy in the treatment of writing spasm has a significant and rapid positive effect and can be considered as a promising method of treatment for this pathology.

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