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DIFFERENTIAL DIAGNOSIS OF DEVIK'S DISEASE WITH MULTIPLE SCLEROSIS

Introduction. The article is devoted to demyelinating diseases of the central nervous system, which have a progressive course, persistent disability in working age. The main points of epidemiology, pathogenesis, clinic and diagnosis are summarized. The differentiation of Devik's opticomyelitis with multiple sclerosis was carried out. Given the rarity of the disease, a description of a clinical case is given in which the diagnosis was established 8 years after the onset of the disease, based on modern diagnostic criteria, taking into account laboratory and instrumental data.

Keywords: differential diagnosis of disability, Devik's disease, central nervous system, multiple sclerosis, antibodies to aquaporin -4.

Relevance. Opticoneuromyelitis (ONM) (disease Devika) is an idiopathic inflammatory demyelinating disease characterized by the predominant involvement in the pathological process of the optic nerves, spinal cord with extensive transverse myelitis LETM (longitudinally extensive transverse myelitis) at the level of the thoracic, less often cervical segments with relative preservation of the brain [1,2].

New criteria for opticomyelitis are autoantibodies – markers of ONM-IgG. Therefore, the combination of the clinic, MRI data and ONM-IgG status assessment provides the maximum diagnostic opportunity compared to individual components of the diagnosis [1]. Opticoneuromyelitis is a fairly rare disease, and currently there is no data in our country on the incidence of opticoneuromyelitis and associated disorders. However, the improvement of diagnosis, the development of criteria for the diagnosis of opticoneuromyelitis forces a new assessment of the relevance of this problem in modern neurology. The greatest difficulties in the differential diagnosis of opticoneuromyelitis are multiple sclerosis, as well as isolated syndromes: myelitis and optic neuritis. An important aspect of the management of patients with demyelinating diseases is the differential diagnosis between opticoneuromyelitis and multiple sclerosis, since, despite the similar clinical picture, treatment approaches are fundamentally different, moreover, classical drugs that alter the course of multiple sclerosis (PITRS) can worsen the patient's condition with opticoneuromyelitis.

Given the complexity of diagnosis and the rare occurrence of this pathology among patients, we provide our own description of the clinical case.

Patient S., 36 years old, was sent to the office of multiple sclerosis with complaints of: decreased visual acuity in both eyes (atrophy of the optic nerve OU); weakness in all limbs, more in the lower ones; stiffness in the legs; gait disorder (needs constant support, no more than 20 meters passes without stopping); numbness in the legs, spreading from the sternum to the feet, a feeling of a "pillow" under the feet); burning sensation, tightening from the waist, spreading to the hips, shins; imperative urge to urinate; constant headaches, dizziness; impaired coordination, unsteady gait.

It was found out from the anamnesis of the disease: in 2020, after suffering an acute respiratory viral infection and acute cystitis, there was a decrease in visual acuity in the left eye. She was on inpatient treatment with 02/24/2020 to 03/06/2020 at the place of residence. The diagnosis was made: OS Acute retrobulbar neuritis. A course of treatment was carried out: Prednisone IV, diprospan 1.0 retroorbitally,

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after 7 days she was discharged with improvement. After 3 months, weakness appeared in all limbs, limited movement in them, could not move independently, needed outside care. The patient was hospitalized in the neurological department with 05/19/2020 to 06/01/2020, where the diagnosis was made for the first time: Multiple sclerosis. Mild iron deficiency anemia.

Ophthalmologist's conclusion: Partial atrophy of the eye. An MRI of the brain was done on 06/08/2020. Conclusion: here were no macrostructural changes in the brain. It is impossible to exclude a developmental anomaly – occipitalization of the Atlas in combination with a syringomyelic cavity in the initial departments of the spinal cord. MRI of the cervical spine from 06/10/2020 The spinal cord is located in the center of the spinal canal, its thickness is at the level of C2 -10.8 mm, from the level of C2 to C5, a site of an inhomogeneously elevated MR signal at T2 VI and an inhomogeneously weakly hypointensive at T1 VI is up to 5.0 mm wide.

Conclusion: the picture of moderately pronounced degenerative-dystrophic changes in the cervical spine is osteochondrosis, the demyelinating process of the spinal cord cannot be excluded. A course of pulse therapy with methylprednisolone was conducted according to 1000 mg No. 5 with a positive effect in the form of increased strength in the legs.

After 6 months, dizziness, unsteadiness when walking, numbness of the hands appeared. She received inpatient treatment with 02.11.2020 to 19.11.2020 with the diagnosis: Multiple sclerosis, cerebrospinal form. Immunomodulatory therapy has been prescribed, with a drug that alters the course of multiple sclerosis (PITRS) - Interferon beta1b 9.6 million, every other day, subcutaneously.

In January 2023, after suffering from acute respiratory viral infection, there is a decrease in visual acuity in the right eye (a dark spot in front of the right eye). She was hospitalized in the eye the department where the patient was from 30.01.2023 to 06.02.2023 with a diagnosis of retrobulbar neuritis.

Ophthalmologist's conclusion: the fundus is pale pink, slight hyperemia, blurred borders, veins are dilated, arteries are narrowed. Visual fields –slight narrowing of the visual fields to 10-15 degrees from the nasal side, central scotoma on the right.

Treatment was performed: retrobulbar diprospan 1.0 No. 1; Dexamethasone 0.7 retrobulbar No. 7. Neurologist's conclusion: Multiple sclerosis, remitting course, exacerbation. Conducted: Dexamethasone 32 mg IV drip No. 3, then 16 mg IV drip No. 3. Regular inpatient treatment from 04/19/2023 to 30.04.2023 with complaints of headaches, unsteadiness when walking, dizziness, weakness and numbness in the extremities. MRI of the brain dated 04/24/2023 Conclusion: Signs of moderate external hydrocephalus, asymmetry of the lateral ventricles.

MRI of the cervical spine with contrast from 04/24/2023 In the body of the C6 vertebra, a rounded formation with clear, even contours, a hyperintensive MR signal at T1- T2 VI, a homogeneous structure, with dimensions of -9.0*9.7 mm is determined. The spinal cord in the cervical the department has a regular shape, its contours are clear, smooth, and the structure is heterogeneous due to visualization in the segment C2-C4 of an elongated intramedullary lesion without clear contours, inhomogeneously hyperintensive in the regime T2 VI and slightly reduced intensity in T1 images, 32.5 mm long and 4.0-5.5 mm wide. After intravenous amplification, no paramagnetic deposition sites were detected in the focus.

Conclusion: MR-signs of hemangioma in the body of the C6 vertebra, focal changes in the spinal cord at the C2-C4 level (demyelinating process? Myelopathy?).

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MRI of the thoracic spine dated 04/17/2023 Conclusion: MR changes in the thoracic region and spinal cord are not detected. Hemangioma in the body of the C7 vertebra. The diagnosis was made: Multiple sclerosis, cerebrospinal form. Tetraparesis with predominance in the lower extremities, exacerbation. Pulse therapy with methylprednisolone was performed at 1000 mg IV drip No. 3, 500 mg IV drip No. 3. With deterioration in the form of increasing weakness in all limbs, stiffness in them, increased unsteadiness of walking, impaired vision, pelvic disorders in 2024, every 3-4 months she underwent a course of inpatient treatment in the neurological department with a diagnosis: Multiple sclerosis, cerebrospinal form. Tetraparesis with predominance in the lower extremities, exacerbation. Courses of pulse therapy with methylprednisolone (1000 mg No. 5) with a positive effect were conducted.

Considering the side effects in the form of abscesses at the injection sites on immunomodulatory therapy (PITRS) - Interferon beta-1b 9.6 million, the patient was transferred to - Interferon beta-1a 30 mcg (PITRS low-dose interferon), intramuscularly, 1 time per week. According to the patient, there was no effect from PITRS therapy.

Conclusion. Thus, based on complaints, anamnesis, development of symptoms and course of the disease, laboratory data (positive analysis for aquaporin - 4 IgG) and instrumental studies using diagnostic criteria of opticomyelitis (compliance of the three main large criteria and two small ones, it can be argued that the patient has a diagnosis: Devik's opticoneuromyelitis, recurrent course, lower spastic paraparesis, impaired pelvic organ function in the form of imperative urges, atrophy of the optic nerves of both eyes. EDSS - 6.0 points. PITRS (Interferon-1a 30 mcg) has been canceled, immunosuppressive therapy is being performed.

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