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Triple trouble: a man with Parkinson's disease, dural arteriovenous fistula and probable inflammatory disease of the central nervous system

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Introduction: In recent years there has been renewed interest in the role of autoimmunity in many neurological disorders such as neurodegenerative diseases and multiple sclerosis. The possible role of impaired immune response in etiopathogenesis of movement disorders such as parkinsonism or dystonia is also commented.

Objective: We present the case a 67-year-old man with a rare concomitant diagnosis of Parkinson's disease, inflammatory disease of central nervous system (CNS), and spinal arteriovenous fistula.

Methods: Since the beginning of his clinical history, the patient underwent neurological and radiological tests (physical examination, brain and spinal cord magnetic resonance imaging (MRI), Dat - SPECT and angiography).

Results: At the age of 65 the patient was diagnosed with Parkinson disease, which started with tremor in the right upper limb and micrography. After 2 years he presented difficulty in walking with weakness of the right lower limb with a subacute onset and progressively worsening course. Patient was then hospitalized, the spinal cord MRI showed characteristics suspicious for dural arteriovenous fistula in the dorsal region, confirmed by angiography. Endovascular surgery to embolize the dural fistula was performed. Incidentally the MRI study revealed previous cervical myelopathy and some lesions of the white matter of the brain. In the suspicion of inflammatory disease, blood autoantibody screening was performed, revealing positivity of antibodies to ENA and lupus anticoagulant, and absence of antibodies to myelin oligodendrocyte glycoprotein (MOG). Patient refused to perform lumbar puncture. Further diagnostic investigations are underway.

Conclusions: The patient represents a very rare case in which 3 pathologies with different etiology have occurred in the same subject. We want to underline the importance of not underestimating new symptoms in patients with diagnosis of already complex pathologies.

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