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(REVIEW ARTICLE)

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Acute polyradiculoneuritis revealing HIV infection associated with myositis (about a case)

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Summary:

AcutePRN are described in this review, two uncommon forms of treatable neuropathies. They associate a proximo-distal sensory-motor attack whose mode of appearance is acute or chronic. Both forms are dysimmune. Their treatments are based on immunomodulation or immunosuppression for chronic forms. The sequence of assessment and therapeutic methods are explained in light of recent consensus data. Treatments aim at better analgesia and early intervention through rehabilitation.

Keywords: Polyradiculoneuritis acute; HIV; Case; Treatable neuropathies

1. Introduction

Polyradiculoneuritis is a diffuse damage to the peripheral nerves, characterized by inflammation predominating at the level of the nerve roots. It presents in different forms, notably acute, corresponding to Guillain-Barre syndrome, as well as subacute and chronic forms such as chronic inflammatory demyelinating polyradiculoneuritis (CIDP). CIDP is characterized by segmental and multifocal demyelinating lesions, of autoimmune origin, evolving chronically and can lead to often disabling conditions, sometimes sensitive to corticosteroids.

Representing approximately 5% of peripheral neuropathies, the diagnosis of CIDP is based on a thorough clinical evaluation, biological analyzes and electroneuromyographic (ENMG) studies. However, diagnosis can be difficult due to atypical clinical variants. Treatment of CIDP generally involves plasmapheresis and administration of high doses of intravenous immunoglobulin, which have been shown to be effective in many cases.

2. Material and methods

We present here the case of a 26-year-old patient with no particular history, treated at the Center of Virology and Infectious Diseases of the Mohamed V Military Hospital in Rabat, in whom acute polyradiculoneuritis revealed HIV infection.

3. Results and discussion

The patient presented symptoms 20 days ago, starting with polyarthralgia in the large joints of the two upper limbs, accompanied by progressively worsening morning headaches, as well as progressive functional impotence of the two lower limbs in a symmetrical manner, without disturbances. Notable sensory, sphincter or respiratory symptoms. He also reported a skin rash and presented with unspecified feverishness, as well as a weight loss of 12 kg in 20 days, with a deterioration in general condition.

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On admission, the patient was conscious, oriented, afebrile, and hemodynamic ally and respiratory stable. Neurological examination revealed flaccid quadriplegia

Areflexic, with muscular strength estimated at 2/5 in the upper limbs and 3/5 in the lower limbs. Cutaneous-plantar reflexes were indifferent, superficial sensitivity was preserved, but there was vibrational hypoesthesia and coordination difficult to assess.

3.1. The paraclinical assessment showed:

A complete blood count and hemostasis assessment without any particularities.

- A CRP of 12, a ferritin of 2234, a CPK of 8761 and an LDH of 1461.
- A blood ionogram showing serum sodium at 136 and serum potassium at 3.6.
- A liver test revealing hepatic cytolysis.
- A normal brain CT, brain MRI and chest X-ray.
- A normal lumbar puncture.
- Plasma protein electrophoresis showing a gamma globulin peak.
- Negative immunological and co-infection assessments.
- Positive HIV serology and Western blot.
- **On electromyogram (EMG)**: we observed a decrease in sensory and motor nerve conduction velocities in the upper limbs, as well as an absence of these velocities in the lower limbs, accompanied by an absence of H and F reflex waves. , showing diffuse sensorimotor denervation in all four limbs, suggestive of demyelinating polyradiculoneuropathy.

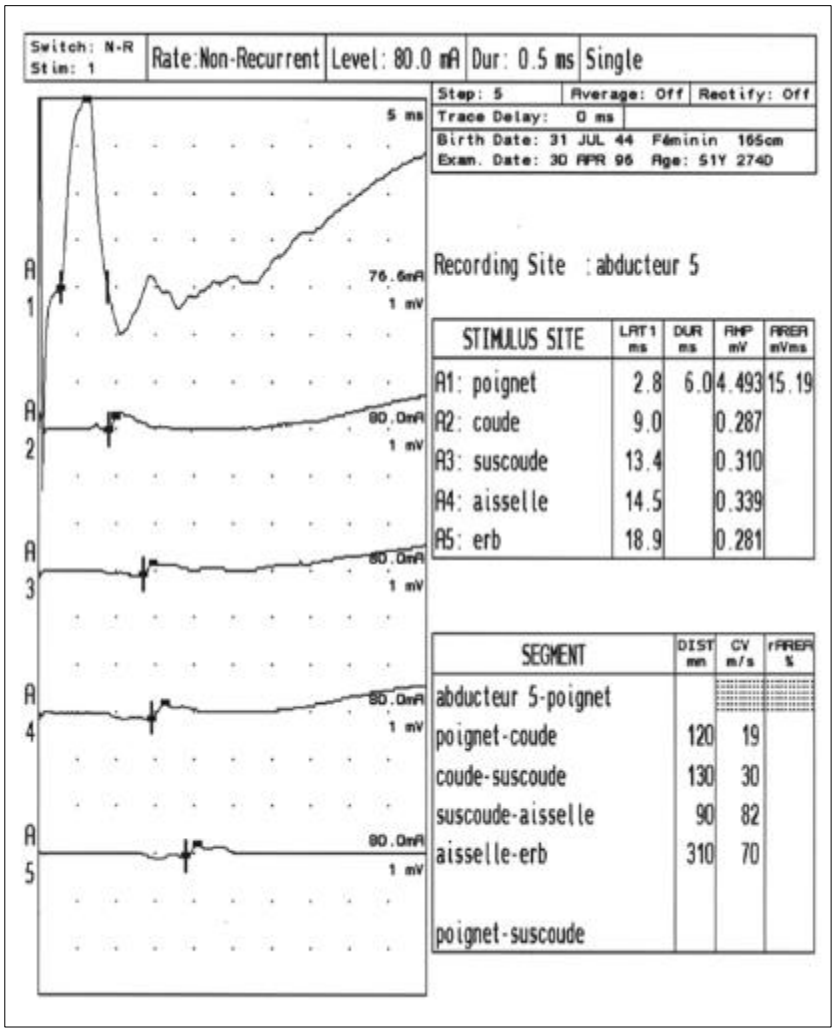

Figure 1 EMG: staged stimulation of the ulnar nerve: wrist, below elbow, above elbow and axillary

4. Discussion

Chronic inflammatory demyelinating polyradiculoneuritis (CIDP) is a rare neuropathy, probably of dysimmune origin, characterized by a chronic or recurrent course, and causing motor disability of variable intensity. It manifests itself as peripheral neurological damage, leading to a motor and sensory deficit that is usually symmetrical, affecting both the distal and proximal parts of the limbs, with a predominance of motor signs and a progressive onset over several months. In addition to clinical elements, diagnosis requires biological parameters (such as cerebrospinal fluid), electromyographic studies, and sometimes histological examinations.

The distinction between primary and secondary forms is mainly of prognostic interest, secondary forms seeming to have a less favorable prognosis with a more frequent progression towards chronicity. Many etiologies can be responsible for CIDP, including infectious causes such as HIV infection, viral hepatitis B or C, or autoimmune causes such as certain connective tissue diseases or systemic vasculitis. CIDP can also have a paraneoplastic origin. There

Occurrence of peripheral neuropathies during hemopathy is rare, but can be revealing or precede the diagnosis of a hemopathy by several years.

5. Conclusion

In conclusion, the diagnosis of polyradiculoneuritis is based on clinical elements, but electromyographic studies play a vital role in confirming the diagnosis, classifying the disease and evaluating the prognosis. It is essential to carry out these examinations as soon as the diagnosis is suspected, and in case of normal or equivocal results, it is recommended to repeat them. HIV infection is associated with various neurological complications, including polyradiculoneuritis. The objective of this study was to describe the typical electrophysiological abnormalities associated with polyradiculoneuritis. The occurrence of cases of acute polyradiculoneuropathy is not surprising, given that this inflammatory neuropathy is often preceded by an infectious episode.

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