

A Rare Case of Neuropsychiatric Systemic Lupus Erythematosus

A. Trandafir¹, E. Gradinaru¹, G. Ceobanu¹, R. Danulet¹, I. Saulescu^{1,2}

1. "Saint Mary" Clinical Hospital, Bucharest, Romania, 2. "Carol Davila" University of Medicine, Bucharest, Romania

BACKGROUND:

Systemic lupus erythematosus (SLE) is a heterogenous autoimmune disease, with unique characteristics, affecting every major organ in the body. Neuropsychiatric manifestations (NPSLE) are multifaceted and represent a diagnostic challenge.

CASE REPORT

We present the case of a 25-years old female, diagnosed with juvenile SLE with cutaneous, articular, renal and neurological involvement, that attended the emergency department in our clinic with *malaise, fever, myalgias, severe muscle stiffness, paraparesis and acute retention of urine*. The symptoms begun 3 weeks after she had a curettage. The pathologic clinical examination revealed *malar rash, alopecia, steppage gait, absent deep tendon reflexes of the lower extremities and diminished on the upper extremities*.

The most feasible **differential diagnosis** was infectious meningoencephalitis, acute progressive polyradiculoneuritis and acute transverse myelitis (ATM). After interdisciplinary team examinations (including lumbar puncture and CSF examination, infectious disease, gynecologic and neurologic examination) and considering that MRI of the vertebral column exhibit longitudinally extensive myelitis (Fig.1), the diagnostic was ATM.

The next challenge was to determine the **etiology of ATM** (antiphospholipid syndrome, an infectious cause or SLE flare). Knowing that the patient had a *hormonal trigger* that could activate SLE (the pregnancy) and based on the other *clinical* (malar rash, alopecia, fever) and *paraclinical findings* (hypocomplementemia, anti-double stranded DNA antibody in high titers, inflammatory syndrome), we concluded that this acute manifestation was related to a **new flare of SLE**.

The patient *fully recovered* after intravenous pulse-therapy with Methylprednisolone and intravenous Cyclophosphamide.

The presence of myalgias, severe muscle stiffness, paraparesis and acute retention of urine with absent tendon reflexes should make clinicians think about ACUTE TRANSVERSE MYELITIS. The differential diagnosis is more difficult if the patient has a source of infection.

After the ATM diagnosis is made, clinicians should determine the exact etiology for the proper treatment. The faster the therapy, the better outcome will have the patient.

The importance of a multidisciplinary team cannot be emphasized enough.

Contact information: andreeaiulia16@gmail.com



Fig.1

DISCUSSION

NPSLE manifestations are an important cause of morbidity and mortality with a myriad of clinical symptoms. The importance of a multidisciplinary team in the management of the case cannot be emphasized enough. This case raises awareness about the heterogeneity and challenges of SLE.

REFERENCES

1. Hochberg M. et al, Management of Central Nervous System Lupus. Rheumatology , Seventh Edition (2018); 144: 1181
2. Bertsias GK, et al, EULAR recommendations for the management of systemic lupus erythematosus with neuropsychiatric manifestations: report of a task force of the EULAR standing committee for clinical affairs *Annals of the Rheumatic Diseases* 2010;69:2074-2082
3. Hryb, Javier Pablo et al. "Myelitis in systemic lupus erythematosus: clinical features, immunological profile and magnetic resonance imaging of five cases." *Spinal cord series and cases* vol. 2 16005. 7 Jul. 2016
4. Zhang S, et al. Clinical features of transverse myelitis associated with systemic lupus erythematosus. *Lupus*. 2020 Apr;29(4):389-397. Epub 2020 Feb 13. PMID: 32054395.