VZV-RELATED MYELOPATHY: A CASE REPORT

G. Jorio, G. Carlini, C. Fiori, S. Baldinelli, M. Bartolini, M. Silvestrini, L. Provinciali

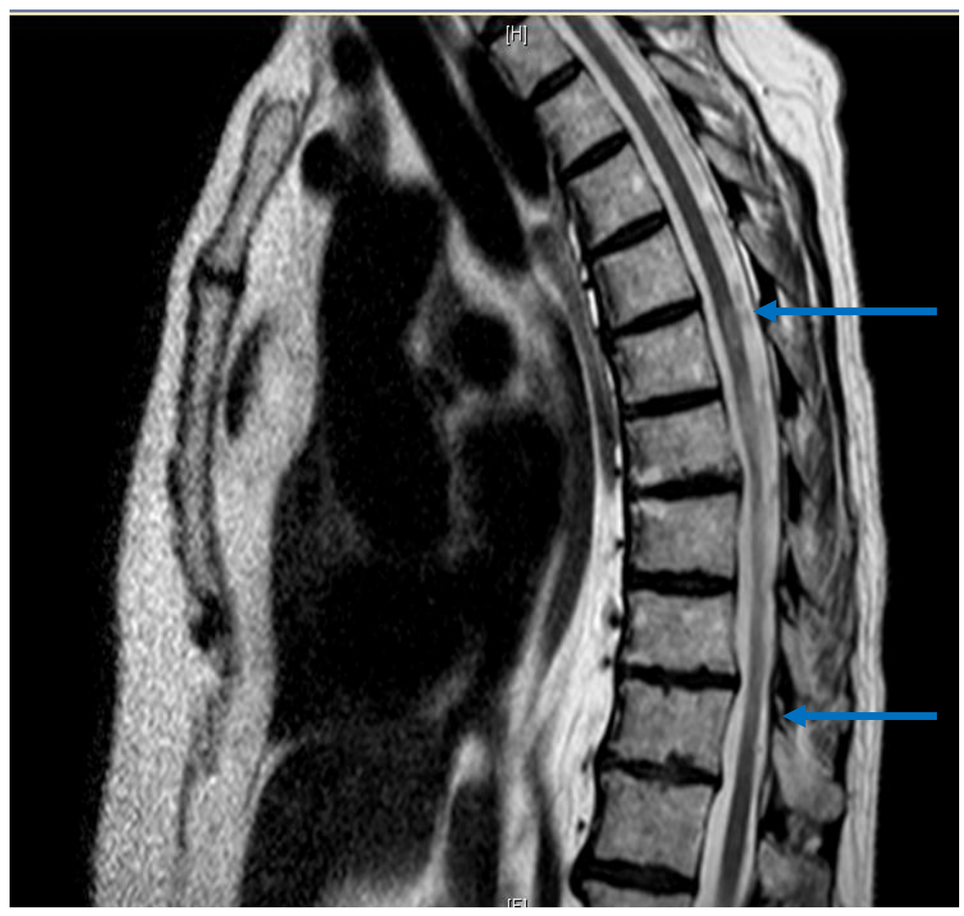
Clinica di Neurologia, Università Politecnica delle Marche

BACKGROUND

Varicella zoster virus (VZV) is an exclusively human neurotropic, double-stranded DNA alpha-herpesvirus. Primary infection causes varicella (chickenpox), after which virus becomes latent in ganglia along the entire neuraxis. VZV can reactivate years later to produce herpes zoster (shingles), which can often cause neurological complications (post-herpetic neuralgia, VZVvasculopathy, meningo-encephalitis, meningoradiculitis, cerebellitis, myelopathy). There are several forms of VZV myelopathy involving a post-infectious process, direct infection of the spinal cord or VZV vasculopathy. Post infectious VZV myelopathy can present as spastic mono or para-paresis, with or without sensory features and sphincter problems. It usually occurs in immunocompetent patients days to week after acute zoster. MRI can reveal spinal cord lesion. The diagnosis is confirmed by the presence of VZV DNA or anti-VZV IgG or both in CSF. The antibody index (CSF antibody titer/serum antibody titer/CFS IgG/serum IgG) superior to 1.5 or 2.0 suggests the intrathecal production of anti-VZV antibodies.

CASE REPORT

A 77 years old female who presented with progressive left leg weakness and gait disturbance. Two weeks before she had developed a focal skin rash on lower left leg with subsequent onset of pain. On admission to our Hospital we could not see the rash, but we found only crusted lesions. Neurological examination revealed severe left leg paresis with Babinski sign. Osteo-tendinous reflex were normal. There were no sensory and urinary disturbances. Spinal cord MRI demonstrated a high-signal-intensity median-left paramedian lesion at D5-D9 level. Laboratory studies showed no immunosuppresion. CSF analisys showed moderate lymphocytic pleocytosis, negative VZV PCR and presence of anti-VZV IgG. The IgG index was 2.26, which suggested CNS synthesis of anti-VZV antibodies.



CONCLUSION

Myelitis is one of the rarest complication of infection with VZV and it can occur in absence of rash (zoster sine herpete). Amplification of VZV DNA by PCR in the CSF and the detection of an intrathecal production of anti-VZV antibodies have important diagnostic value, although their presence depends on the timing of the CSF sampling: the rate of a PCR positive result tends to decline rapidly within 7-10 days after the onset of rash, whereas the rate of anti-VZV IgG tends to increase and be maintained during the clinical course. This case highlights the importance of considering the possibility of VZV myelitis in the differential diagnosis of unknown etiology myelopathy, even in immunocompetent patients or in absence of skin manifestation. A PCR negative result does not exclude the diagnosis.

Sin

XLVII CONGRESSO NAZIONALE
22-25 OTTOBRE 2016 – VENEZIA