

A case of Etanercept-induced myelitis after a long exposure to the treatment in a patient with rheumatoid arthritis



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Background

Etanercept is a Tumor Necrosis Factor alpha (TNF α) inhibitor, commonly used in the treatment of several rheumatologic diseases. Despite its demonstrated benefits, several rare adverse events have been described, including predisposition to demyelinating diseases.[1-3] Here we describe a case of Etanercept-induced myelitis after long-term exposure to treatment in a man with rheumatoid arthritis.

Case report

A 64-years-old man was admitted to the emergency department for progressive weakness and hypoesthesia in the lower limbs from 3 days, resulting in the inability to walk. Moreover, he reported urinary retention, that lead to catheterization the day before due to bladder globus.

Patient's home therapy included weekly administration of Etanercept for more than 10 years for severe rheumatoid arthritis.

The neurological examination revealed severe paraparesis (MRC 3/5 in all lower limb muscles), preserved deep tendon reflexes and hypoesthesia with a D10 sensory level. A spinal cord MRI showed an extensive dorsal myelitis involving the conus medullaris. Lumbar puncture showed mild aspecific monocytic pleiocytosis; CSF cultures and PCR were negative; anti-AQP4 or Anti-MOG antibodies and antibodies directed against intracellular neuronal proteins were also negative. Oligoclonal bands were not detected. Therefore, Etanercept was suspended and high dose i.v. methylprednisolone was administered for 5 days. After i.v. steroid treatment and daily physiotherapy, patient's clinical condition gradually improved.

He resumed walking with double support and supervision and was discharged with diagnosis

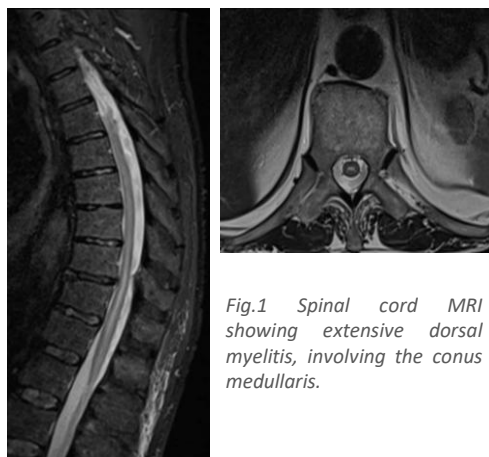


Fig.1 Spinal cord MRI showing extensive dorsal myelitis, involving the conus medullaris.

diagnosis of "Etanercept-related myelitis" and transferred to a rehabilitation centre.

Conclusion

Spinal cord immune-mediated inflammatory disorders are an uncommon, but potentially severe complication of some drug therapy. The use of TNF- α inhibitors in rheumatic and inflammatory diseases has been associated with demyelinating and other inflammatory CNS conditions, including myelitis. Myelitis presents especially in the first years of treatment, but few cases have been described after a long exposure to the drug, as in our experience. Early diagnosis and treatment is crucial in these conditions to prevent further neurological damage and disability.

Treatment involves administration of high-dose i.v. steroids and discontinuation of the offending agent. The causative relationship between demyelinating diseases and anti-TNF α treatment remains unclear, but given the growing evidence on these events, a patient candidate to TNF- α inhibitors, should be informed about this risk.[1-3]

References

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