MENINGITIS-RETENTION SYNDROME

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Meningitis-retention syndrome (MRS) is a rarely reported and poorly understood entity that combines urinary retention and aseptic meningitis. The etiology remains unknown, although both infectious and inflammatory causes have been proposed.

A 35-year-old female presented with a history of flu-like symptoms and fever followed by urinary retention of more than 1000ml two weeks later. On examination she had mild nuchal rigidity and generalized hyperreflexia. The CSF showed 96 leukocytes (86 lymphocytes and 10 polymorphonuclear cells), mild proteinorraquia (0,46g/L) and normal glucose (0.51g/L). Herpes simplex virus PCR was negative as were serologies for EBV, CMV, borrelia, bartonella, mycoplasma and mycobacterium tuberculosis. The neuroaxis MRI was normal and the urodynamic study revealed a hyposensitive and acontractile detrusor. She was treated with 3 weeks of antibiotics, tamsulosin and intermittent urinary catheterizations. There was only partial clinical and CSF cell count improvement. She then had a 3-day course of methylprednisolone 1gr/day with gradual but complete resolution. An uroflowmetry performed 5 months after the onset of symptoms showed significant improvement: voiding became possible without straining and the residual volume decreased dramatically.

MRS should be considered in the differential diagnosis of urinary retention and meningitis. Whether this syndrome represents a sacral myeloradiculitis, a parasympathetic pelvic ganglia involvement or another lesion throughout the neuroaxis remains controversial. Corticoid pulses have been used with inconsistent results. In this case, clinical recovery coincided with high dose steroid treatment, suggesting that an immune-mediated mechanism may underlie such condition, in line with what is predicted to occur in acute disseminated encephalomyelitis (ADEM).