

Detrusor-sphincter dyssynergia in lumbosacral radiculopathy : A Case report

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Introduction

The bladder function is controlled by central and peripheral nervous systems by manage to storage and voiding urine. The pathophysiology of detrusor-sphincter dyssynergia in neurogenic bladder is represented by disruption of spinobulbospinal tract between the pontine micturition center(PMC) and Onuf's nucleus. And, Injury to either the sacral cord or cauda equina Results in detrusor hypoactivity/areflexia with sphincter weakness.

Case

A 59 year-old female presented to our department with the symptoms of voiding difficulty and perianal numbness. Spinal magnetic resonance image showed lumbar disc herniation at L4/5/S1 with thecal sac compression. Also, there were neural foramen stenosis in the left at L4/5, and in the right at L5/S1. Pudendal nerve somatosensory evoked potential study stimulating clitoris and recording from scalp showed absent evoked potentials in right side and acceptable range of P1 and N1 latency in left side. BCRL study stimulating clitoris and recording from bulbocavernous muscles showed prolonged onset latency in right side and acceptable values in left side. Urodynamic study showed hyposensitive, normotonic, hypoactive, no-reflexic type bladder with detrusor-sphincter dyssynergia.

Conclusion

We report a patient who had an unusual Result of urodynamic study which presented detrusor-sphincter dyssynergia with areflxic type bladder in lumbosacral radiculopathy. Despite the urodynamic study shows detrusor-sphincter dyssynergia which suggests spinobulbospinal tract impairment, this patient has no evidence of central cord lesion in neither electrodiagnostic study nor spinal magnetic resonance image. Thus, we should consider secondary reason like psychogenic cause or pain during urodynamic study to provide more precise diagnosis and treatment plan for neurogenic bladder.