

## **URODYNAMIC AND RECTOMANOMETRIC FINDINGS IN PATIENTS WITH SPINAL CORD INJURY**

### **Aims of Study**

Patients with spinal cord lesion suffer from complex disorders of bladder and anorectal function. We assessed the value of urodynamics and anorectal manometry as prognostic and diagnostic tools in these patients and evaluated the usefulness of these techniques for the differentiation between complete and incomplete spinal cord lesions.

### **Methods**

30 patients with suprasacral spinal cord injury (6 women, 24 men, mean age 31 years) underwent anorectal manometry and urodynamics within the first 40 days after injury. The findings were compared to the results of a clinical neurological evaluation.

### **Results**

15 patients were classified as complete lesions on their clinical signs. 3 of these lesions were incomplete according to urodynamic testing and 5 were incomplete according to visceral sensory testing by anorectal manometry. Despite significant differences in maximum bladder capacity (589 cc versus 465 cc), maximum detrusor pressure (18 cm H<sub>2</sub>O versus 31 cm H<sub>2</sub>O) was not significantly different between patients with complete and patients with incomplete spinal cord injury. Anorectal manometry did not reveal any significant differences in resting pressure, abdominal pressure and maximal rectum volume between these groups.

### **Conclusions**

Urodynamics and anorectal manometry may be superior to neurological assessment of completeness of spinal cord lesions. Urodynamics and anorectal manometry were not helpful in the prediction of onset or severity of detrusor hyperreflexia. Thus, we do not regard anorectal manometry as a standard diagnostic tool in spinal cord injury patients.