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

METHODS: 32 patients with supersacral spinal cord injury (7 women, 25 men, mean age 31 years) underwent anorectal manometry and urodynamics within the first 40 days after spinal cord injury. The findings were compared to the results of a neurological evaluation, including visceral sensory testing and pudendal nerve terminal motor latency testing.

RESULTS: 15 patients were classified as complete lesions. 3 of these lesions were incomplete according to urodynamic testing and 5 were incomplete according to anorectal manometry. Maximum bladder capacity (521 vs. 450 cc) and maximum detrusor pressure (16 vs. 19 cm H2O) were 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 volume between theses groups either. CONCLUSIONS: Urodynamics and anorectal manometry may be superior to neurological assessment of completeness of spinal cord lesions. Urodynamics and anorectal manometry did not demonstrate any significant differences in capacity and resting pressure between these groups.