

Long-term urodynamic follow-up after external sphincterotomy in patients with spinal cord injury

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Introduction and Objective

- External sphincterotomy (ES) is an therapeutic option for male patients with detrusor-sphincter dyssynergia (DSD) due to spinal cord injury (SCI)
- ✓ Some patients fail and need to change their lower urinary tract management after ES
- ✓ Detrusor function has been reported to be one of the potential causes of failure of this procedure.
- ✓ In the present study, we reviewed the urodynamic data before and after ES and analyzed for possible causes of failure of this procedure.

Materials and Methods

- ✓ A total of 39 patients followed up for at least 5 years after ES were included
- Mean follow-up period was 16.0 years
- ✓ Nine patients received second ES
- ✓ ES was performed using an electrocautery with an incision at the 12-o'clock position from the midprostatic urethra through the bulbomembranous junction
- Urodynamic assessment was routinely performed every 2 or 3 years after ES
- ✓ We reviewed and analyzed them before and after ES (before ES and 1-, 3-, 5-, 10-, 15-, 20 year after ES).



- Maximum detrusor pressure is gradually decreased after ES
- DO, a driving power for voiding in SCI patients is gradually decreased after ES
- Preoperative maximum detrusor pressure in success group is significantly higher than that in failure group.

These results suggest that the decrease of DO after ES might be one of the reasons for failure after ES and low preoperative maximum detrusor pressure might be a poor prognostic factor of ES.