

TRANSRECTAL ELECTROSTIMULATION – A METHOD TO SPECIFY AN ACONTRACTILE BLADDER DYSFUNCTION?

Aims of Study

A negative ice-water test does not allow an exact classification of an acontractile bladder. If there is a lower motoneuron lesion or a suprapontine problem remains an open question in many patients with an acontractile bladder after back and pelvic surgery. Therefore we initiated a study investigating the effect of S3-transrectal electrostimulation (S3-TES) in patients with an acontractile detrusor.

Methods

Nine patients (seven women, two men) with a cystomanometric proven acontractile detrusor were investigated. Based on history, clinical neurourological investigation and functional diagnostics a decision regarding a lower motoneuron or a suprapontine lesion could not be made. The ice-water test was negative for all patients. Therefore a short, repeated S3-transrectal electrostimulation was performed. The bladder pressure was simultaneously recorded.

Results

Transrectal electrostimulation showed in three of nine patients (33%) an increase of the detrusor pressure related to S3 - electrical stimulation indicating an intact lower motoneuron. Regarding side effects it has to be mentioned that S3-TES causes some degree of pain. Therefore the indication should be proven very carefully.

Conclusions

In case of an acontractile bladder it is very important to distinguish between a lower motoneuron and a suprapontine lesion regarding therapeutic recommendations. If it is possible to initiate a detrusor contraction a lower motoneuron lesion can be excluded. In this situation a neuro-urological approach, e.g., neuromodulation makes sense.