

## URODYNAMICS OF ORTHOTOPIC SIGMOID NEOBLADDER

### Hypothesis / aims of study

To evaluate the urodynamic characteristics of the urinary reservoir and urethral after orthotopic sigmoid neobladder surgery.

### Study design, materials and methods

Methods: Between June 2003 and March 2012, 80 patients underwent orthotopic sigmoid neobladder surgery. Complete urodynamics were performed in all patients with BONITO-II type urodynamic apparatus of Laborie Company, including fulling urinary bladder pressure measurement, pressure-flow study, static and voiding urethral pressure description.

### Results

The volume of urinary reservoir was 400 to 600ml (mean 450ml), residual urine 300 to 100ml (mean 50ml), maximum detrusor pressure 28cmH<sub>2</sub>O to 45 cmH<sub>2</sub>O, storage period Pves 25cmH<sub>2</sub>O~50cmH<sub>2</sub>O, micturition period Pves 80cmH<sub>2</sub>O to 110cmH<sub>2</sub>O. Urethral closure pressure 40 cmH<sub>2</sub>O~60 cmH<sub>2</sub>O. The neobladder was high compliant at early stage and low at late stage.

### Interpretation of results

A large capacity of storage, a comparatively high urethral closure pressure and low intravesical pressure ensure the sigmoid neobladder a good continence, and a micturition period Pves much higher than urethral closure pressure enable a good stream. Nondelemial sigmoid neobladder, which have powerful contractile force that ensure bladder emptying, according with the physiological demands, is an ideal bladder substitution.

### Concluding message

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### Disclosures

**Funding:** None **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** First Affiliated Hospital Of Dalian Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes