URODYNAMICS OF ORTHOTOPIC SIGMOID NEOBLAGDER

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 28cmH2O to 45 cmH2O, storage period Pves 25cmH2O ~ 50cmH2O, micturition period Pves 80cmH2O to 110cmH2O. Urethral closure pressure 40 cmH2O ~ 60 cmH2O. 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
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.

Disclosures
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