

## URODYNAMIC CHARACTERISTICS AND CLINICAL INTERVENTIONS OF NEUROGENIC BLADDER BY CEREBROVASCULAR ACCIDENT

### Hypothesis / aims of study

To explore the urodynamic characteristics and evaluate the clinical interventions efficacy of neurogenic bladder caused by cerebrovascular accident.

### Study design, materials and methods

A total of 40 patients underwent a complete urodynamic study with electromyography from March 2007 to July 2011. The data were analyzed retrospectively.

### Results

A total of 23 patients (58%) had detrusor overactivity . Of 5 patients (13%) had acontractile detrusor. Of 36 patients (90%) had security bladder. Of 2 patients (5%) had upper urinary tract dilation. None patients (0%) with cerebral disease had detrusor-sphincter dyssynergia. After given clinical interventions according to urodynamic characteristics, 1 of the 2 upper urinary tract dilation patients water disappeared, and the other reduced. Before clinical interventions, quality of life score(Qol) was  $(4.4 \pm 0.6)$  . At 2 weeks after clinical interventions, Qol was  $(3.4 \pm 1.0)$  , which reduced  $(1.1 \pm 1.0)$  ; and 3 months later it was  $(2.9 \pm 0.8)$  , which reduced  $(1.5 \pm 1.0)$  .

### Interpretation of results

There was significant difference in the quality of life score before and after the clinical interventions ( $P < 0.01$ ) . There was also significant difference in the quality of life score between 2 weeks later and 3 months later ( $P < 0.01$ ) .

### Concluding message

The main urodynamic characteristic of neurogenic bladder caused by cerebrovascular accident is detrusor overactivity, and the detrusor-sphincter dyssynergia, reflux and upper urinary tract dilation are rare. Clinical interventions according to urodynamic characteristics can protect renal function and improve the quality of life.

### Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** rjcc **Helsinki:** Yes **Informed Consent:** Yes