

639

Kim K<sup>1</sup>, Seo J K<sup>1</sup>

1. *Seoul National University Children's Hospital*

## NEUROGENIC BLADDER DYSFUNCTION IN ADOLESCENT PATIENTS WITH SPINA BIFIDA

### Hypothesis / aims of study

We studied on the neurogenic bladder dysfunction in adolescent patients with spina bifida

### Study design, materials and methods

All the patients have been continuously followed up from children to adolescent or adult stage in our MMC clinic until now. We selected 75 patients whose age is older than 10, who had urodynamic study at both childhood and adolescent stage. The ratio of myelomeningocele to lipomyelomeningocele was 32 to 43. And male to female ratio was 41 to 34. Twenty-one patients received augmentation cystoplasty. Among them 15 patients underwent Mitrofanoff procedure. Thirty-six patients have been treated with anticholinergics and 52 patients used clean intermittent catheterization (CIC).

### Results

In urodynamic findings, the incidence of detrusor overactivity was more frequent in adolescent stage than in children (41.3% vs. 28%). And vesicoureteral reflux was rarely found in adolescent stage than children (5.3% vs. 17.3%) Underactive bladder was more frequent in adolescent stage than in children (40% vs. 26.7%). Twenty-four adolescent patients still suffered from incontinence. Among them 6 patients did not perform CIC regularly. Thirty-nine patients had acute pyelonephritis history. Among them 23(58.9%) patients associated with poor compliance of CIC or medication. Fifteen patients had bladder stone at adolescent follow up stage.

### Interpretation of results

Strict CIC and medication is needed in adolescent stage for continence and prevention from pyelonephritis.

### Concluding message

Poor compliance of anticholinergics and CIC in adolescent patients with spina bifida causes more frequent incidence of incontinence, bladder stone and recurrent pyelonephritis compared to childhood stage.

### Disclosures

**Funding:** none **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** SNUH **Helsinki:** Yes **Informed Consent:** Yes