Surgical Rehabilitation in Children with Urinary Incontinence

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Objective: To evaluate the Mitrofanoff's operation with ileocystoaugmentation and double supraacetabular pelvic osteotomy as method of treatment of urinary incontinence in children.

Material and methods: The performed 46 Mitrofanoff's operations in children aged from 4 to 17 y.o. in Children's Surgical Centre. Three of them had cloacal extrophy, 15 - bladder extrophy, 1 – total epispady, and 27 patients had neurogenic bladder. Bilateral supraacetabular osteotomy was performed in 31 patients with pubic diastasis of 66 ± 4,41 mm.

Results and discussion: Children with neurogenic bladder and total epispady were operated several times before because of urinary incontinence. The restoration of the functional integrity of the bones of pelvic ring and pelvic floor muscles represents itself the goal of primary importance in bladder extrophy correction. Opened pelvic ring is one of the main reasons of anal sphincter incompetence that results in urinary and fluid stool incontinence after implantation of the ureters in the intestine; it took place in 10 patients.

After bilateral supraacetabular pelvic osteotomy all these children got the ability to retain the urine and fluid stool for 3 - 4 hours. We hadn't osteotomy associated complications. Long-term results were evaluated in all children up to 17 y.o. We teached all children self-catheterization of the bladder. They perform it in 4 hour intervals, or more often in the case of necessity.

Bilateral supraacetabular osteotomy stabilizes anterior semiring of the pelvis, makes eases bladder, urethra and external genitalia reconstruction, makes it possible to close anterior abdominal wall defect without tension of soft tissues.

Conclusion: Only complex approach to the treatment of such complex pathology as cloacal extrophy, bladder extrophy and neurogenic bladder may be considered as right way to maximal social rehabilitation of the patients.