

## THE ROLE OF COLPOSUSPENSION IN SELECTED CONGENITAL OR ACQUIRED INCONTINENCE IN GIRLS

### Aims of Study

To investigate the safety and effectiveness of colposuspension in female pediatric patients with structural urinary incontinence.

### Methods

In total 32 girls with urinary incontinence were selected, including 9 with post-urethrotomy incontinence, 7 with congenital bladder neck insufficiency, 5 with absent urethrovesical angle, 5 with hypospadias, 4 with ectopic ureterocele and two with epispadias. Indication for surgery was either failure of conservative therapy during more than 1 year (behavioural biofeedback training, physical therapy or antimuscarinic therapy) or severe anatomical defects of the bladder outlet. Six patients had needle colposuspension and 26 had a Burch colposuspension, combined with reconstruction of the urethra in 6 and of the bladder neck in 7. In all girls, urodynamic testing was performed both preoperatively and postoperatively.

### Results

Postoperatively, 15/32 patients (47%) were completely dry, 13/32 (13%) had minor incontinence and 13/32 (41%) had incontinence requiring pads. In 17/32 patients (53%) additional conservative therapy was necessary. In 5 patients further surgical therapy was performed, including paraurethral bulk injection, urethra reconstruction and bladder neck reconstruction. At the end of follow-up (median 62 months, range 7-156), 59% was completely dry, 22% was minor incontinent and 19% was incontinent. Results for the Burch colposuspension are better than needle suspension in girls. In the Burch group 65% was dry at long-term follow-up. Urodynamic results in general improved after colposuspension. Numbers of patients with detrusor overactivity and urinary leakage decreased and those with residual urine increased somewhat. Median urethral resistance decreased urodynamically. Bladder capacity remained the same overall.

### Conclusions

In a selected group of female pediatric patients with structural urinary incontinence, colposuspension can be needed as a therapeutic tool. It is a safe and reasonably effective procedure, with 19% therapeutic failure. In general, urodynamically these girls improve after colposuspension. Needle suspension in girls has disappointing results compared to Burch-type colposuspension.