

## Evolution of Female Stress Urinary Incontinence Treatment

**Introduction and Objective:** The treatment of female stress urinary incontinence (SUI) has gone through several developments in recent years. The authors decided to assess the evolution of SUI treatment in their hospital.

**Materials and Methods:** Retrospective data was collected concerning all patients operated for SUI between 1995 and 2010. An inquiry evaluating urinary incontinence complaints, patient satisfaction, including the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF) was carried out. All data and responses were statistically analyzed.

**Results:** There were 1104 female patients operated for SUI; 307 patients were contacted constituting our sample. The surgical techniques used were the Burch colposuspension, the Lapedes and the Marshall-Marchetti-Krantz cystourethropexy (MMK), rectus fascia suburethral sling, Gittes needle colposuspension, retropubic suburethral sling (TVT-RP) and the transobturator suburethral sling (TVT-O). No patients submitted to rectus fascia suburethral sling could be reached and only two patients of Lapedes technique were contacted, undermining any conclusions concerning these two procedures. The mean hospital stay 3 years before and 3 years after the introduction of a new technique shows a reduction from 9.4 days to 3.7 days (-60.0%) once the TVT-RP was introduced in 2000, and from 3.7 to 2.4 days (-36.4%) after the TVT-O was introduced in 2004. The number of treated patients increased sevenfold since 1999, to more than 150 surgeries per year. Significant lower complication rates, lower ICIQ-SF scores and higher leak-free rates were observed for both TVT techniques, in comparison with other older procedures.

Surgical technique	Operated patients	Contacted patients	Age at surgery*	Hospital stay*	Complications	ICIQ-SF*	Global improvement	Leak-free	Satisfied patients
Lapedes	4	2	54.0±18.4	6.0±1.4	0%	16.5±0.7	100%	0%	100%
Fascial sling	6	-	69.5±6.9	7.3±4.3	-	-	-	-	-
MMK	19	8	54.4±9.7	11.1±5.2	62.5%	6.8±6.3	75.0%	37.5%	100%
Gittes	30	11	55.7±7.9	7.2±1.7	36.4%	8.0±6.1	81.8%	36.4%	90.9%
Burch	43	17	58.2±9.3	10.5±3.5	23.5%	6.5±7.2	76.5%	47.1%	88.2%
TVT-RP	198	44	54.4±10.9	3.3±1.8	15.9%	5.25±6.8	81.8%	56.8%	86.4%
TVT-O	804	225	59.0±11.6	1.6±0.7	8.9%	5.5±7.0	85.3%	56.9%	84.4%
*mean ± S.D.									

**Conclusion:** Novel techniques such as the TVT-RP and the TVT-O had a significant impact on patients and hospital logistics. They reduced significantly surgical aggressiveness and complication rates, shortened the patients' stay in the hospital, and quickly outnumbered all other procedures for SUI treatment. Subjective patient satisfaction doesn't necessary correlate with ICIQ-SF scores or objective leak-free status independently of the chosen surgical technique.