

7- YEAR OLD CLINICAL EXPERIENCE OF TREATING WOMEN'S URINARY INCONTINENCE USING SUBURETHRAL SLINGS

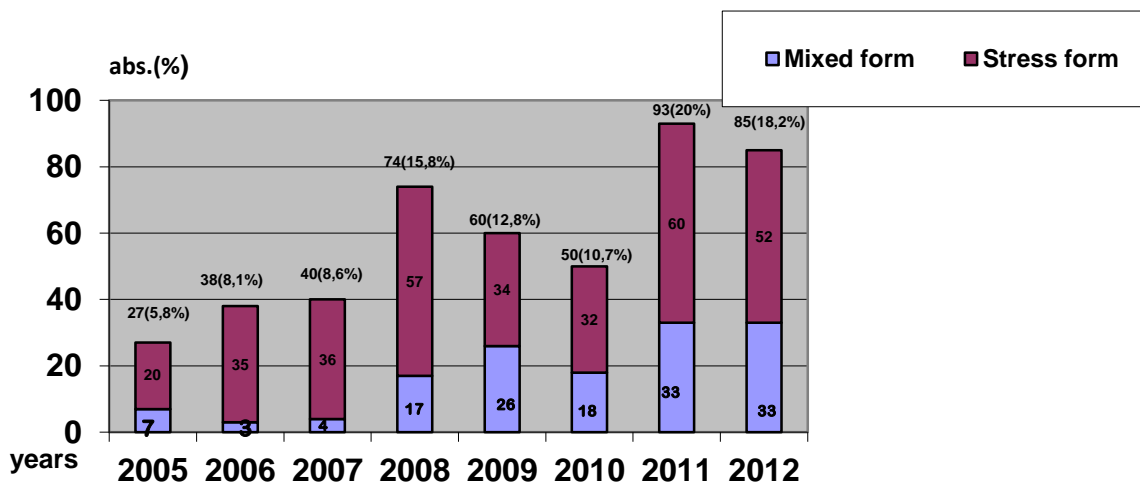
Hypothesis / aims of study. Efficiency assessment of the usage of suburethral slings in the treatment of stress and mixed urinary incontinence and frequency of postoperative complications in near and long-term postoperative period.

Study design, materials and methods. In the period of 7 years (from March 2005 to December 2012) in the department of operative gynecology 467 women have been operated on the urinary incontinence. The middle age of the patients was 57± 3.2 years old.

The patients were examined in accordance with the developed algorithm: complaints, anamnesis, vaginal examination with functional tests, the urination diary filling, general testing of blood and urine, 3-times bacterial evaluation of urine, pelvic ultrasound, ultrasound examination of urethra-vesical segment, urodinamic evaluation. General success rate of urinary incontinence correction by using suburethral slings has been estimated - the absence of the disease relapse, the urine continence in the remote period of observation of more than 12 weeks.

Results. On the basis of preoperative examination there was established stress urinary incontinence of 326 (70%) women, there has been found mixed incontinence of 141 (30%) (picture 1).

Distribution of incontinence forms in years, n=467



Types of installed

suburethral slings are given in table 1.

Table 1

Distribution on types of installed suburethral slings in 7-year observation period

	2005y	2006y	2007y	2008y	2009y	2010y	2011y	2012y	Total
TVT	4	-	-	-	-	-	-	-	4
TOT	5	8	-	-	-	-	-	-	13
TVT-Obturator	18	27	33	48	50	45	65	53	339
TVT-Secur	-	3	5	26	9	5	9	9	66
Monarc	-	-	1	-	-	-	3	-	4
MiniArk	-	-	1	-	1	-	3	-	5
MiniSling	-	-	-	-	-	-	2	-	2
TVT-Abbrevio	-	-	-	-	-	-	10	20	30
Ajust	-	-	-	-	-	-	1	1	2
TVT-Exact	-	-	-	-	-	-	-	2	2
Total	27	38	40	74	60	50	93	85	467

While the operative treatment of mixed form of urinary incontinence the first stage was conservative treatment with antiholinergics, α -adrenomimetics, then there was a surgery, in postoperative period the conservative therapy lasted 2-6 months.

There were no intraoperative complications. Frequency of postoperative complications is reflected in table 2.

Table 2

Frequency of postoperative complications in early and late postoperative period

	Urinary retention (in early)	The erosion of the vaginal wall	Detruzor overactivity De novo	Relapse of detruzor overactivity	Relapse of Stress urinary incontinence

	postoperative period) Residual urine(more than 20 ml)				
2005 y	-	1	-	7	-
2006 y	-	3	1	4	4
2007 y	1	2	2	5	-
2008 y	2	-	1	3	1
2009 y	1	-	1	3	1
2010 y	-	1	3	2	1
2011 y	1	1	1	2	1
2012 y	-	-	1	-	-
Total	5 (1,1%)	8 (1,7%)	10 (2,1%)	26 (5,6%)	8 (1,7%)

Interpretation of results. Frequency of the vaginal walls erosion is 1,7%, mostly it happened during the first 3 years of the surgery. After identifying it a local anti-inflammatory therapy was done with subsequent appointment of estrogen-containing candles. 3 (of 0.6%) patients had to be operated on the excision of part of the implant with the closure of the defective mucous, which subsequently led to the complete healing of the erosion in the term of up to 2 months. Relapse of the neuro-muscular detruzor and urethra dysfunction was 5,6%, which was mainly connected with a prescheduled termination of the treatment course by the patients, as well as with individual low sensitivity to drugs or with the detection of neurological pathology (Parkinson's disease, myasthenia gravis, pathology of the spine). The appointment of adequate long drug therapy made it possible to eliminate all the patients' complaints.

Concluding message. The overall success rate of urinary incontinence correction by using suburethral slings is 98,3%. The frequency of postoperative complications is from 1,1 to 5,6% in their complex clinical and instrumental assessment. Rate of complications depends on the type of urinary incontinence identified in the preoperative examination. To identify the component of mixed urinary incontinence which significantly reduces the efficiency of sling surgery the patients should have standardized examination in the preoperative stage, including keeping a diary of urination and urodynamic evaluation.

After revealing the neuromuscular dysfunction of the urinary bladder it should be treated before surgery. The repeated urodynamic should be done and the question on expediency of sling operations after drug therapy should be decided. The treatment of neuromuscular dysfunction of the bladder in preoperation period leads to positive results, but not in all cases it guarantees complete getting rid of complaints and requires further monitoring and correction therapy.

Disclosures

Funding: no source of funding and no grant **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of the D.O.Ott's Research Institute of Obstetrics and Gynecology NWD RAMS **Helsinki not Req'd:** We have autonomous ethics committee, which uses the principles of the Declaration of Helsinki **Informed Consent:** Yes