

## **EXPEDIENCY OF UROGENITAL PATHOLOGY CORRECTION COMBINED WITH ABDOMINOPLASTY IN A PLASTIC SURGERY CLINIC**

### **Hypothesis / aims of study**

To prove the expediency of simultaneous sling procedures for stress urinary incontinence (SUI) and/or surgical treatment of genital prolapse in women undergoing abdominoplasty.

### **Study design, materials and methods**

According to our examination algorithm, all female patients seeking plastic surgery are routinely examined by a gynecologist for possible pathology and its timely treatment during simultaneous surgery. Between 2002 and 2003, 165 abdominoplasty procedures accompanied by aponeurosis suturing were performed in our clinic. Gynecological examination revealed genitourinary problems in 92 female patients undergoing abdominoplasty.

The study group included 45 perimenopausal and postmenopausal females (46 to 60 yo) with some degree of genital prolapse and SUI signs, who underwent gynaecological surgery combined with abdominoplasty.

The controls consisted of 47 patients of similar age and genitourinary signs who underwent abdominoplasty but refused to have any gynecological surgery.

The study group was subdivided into 4 subgroups:

Subgroup 1 (n=2) aged 46 to 52, had the history of 2 births and gynecological operations. They had SUI confirmed by ultrasonic and urodynamic studies. No genital prolapse was found. Both patients underwent classical posterior-pubic urethropexy using tension-free vaginal tape (TVT).

Subgroup 2 (n=17) aged 46 to 56, had the history of 1 to 3 births, 7 patients had the history of gynecological surgeries. All patients had SUI combined with genital prolapse. Surgical treatment for prolapse in combination with classical TVT was performed in this subgroup.

Subgroup 3 (n=2) aged 46 to 56, had the history of 1 to 3 births, the history of gynecological surgeries, II or III degree obesity and SUI combined with genital prolapse. Surgical treatment for prolapse in combination with transobturator suburethral tape (T-O-T) for SUI was performed.

Subgroup 4 (n=24) aged 46 to 56, had the history of 1 to 3 births, the history of gynecological surgeries and present genital prolapse. Surgical treatment for prolapse was performed.

### **Results**

The results were assessed during follow-up visits by interviews and questionnaires. The follow-up period was 1,5 years.

Study group. Twenty-two out of 45 (48,9%) patients evaluated their gynecological health as very good, 17 (37,8%) – good and 6 (13,3%) – satisfactory.

Controls. Twenty-nine (62%) patients were readmitted to the Gynecology Department of our clinic to deal with their growing urogynecological problems. The patients observed aggravation of their condition some time after their abdominoplasty procedure, i.e.: 1-2 weeks postoperatively (8 patients, 27.5%), 3 to 4 months postoperatively (16 patients, 55.2%) and 8 to 10 months postoperatively (5 patients, 17.3%). The readmitted patients underwent the following surgeries: T-O-T (n=2), TVT (n=5), surgical treatment for genital prolapse (n=12), TVT combined with prolapse treatment (n=10).

### **Interpretation of results**

The study showed higher degree of satisfaction in patients operated on for SUI and genital prolapse simultaneously with abdominoplasty than in controls who refused to undergo any gynecological surgery and experienced worsening of their condition within 1 week to 10 months postoperatively. The

aggravation of genitourinary condition in female patients after abdominoplasty was associated with reduced volume of abdominal cavity, higher abdominal pressure and consequently higher pressure on the pelvic floor, which resulted in greater genital prolapse and onset or aggravation of existing SUI.

Simultaneous gynecological surgery and abdominoplasty could increase the following complications: delayed micturition in early postoperative period (from average 13.7% to 18%); bladder perforation during classical TVT urethropexy when TVT was performed after abdominoplasty, which was associated with anatomical landmarks shift (from average 1.8% to 6%).

**Concluding message**

1. Abdomioplasty requires simultaneous surgical correction of genital prolapse and/or SUI in female patients with this pathology.
2. Abdominoplasty is a risk factor for genital prolapse and SUI progression.
3. TVT (T-O-T) should be performed prior to abdominoplasty, with original pelvic landmarks and bladder topography.
4. T-O-T is an operation of choice for SUI combined with abdominoplasty, particularly in patients with obesity and history of gynecological surgery.