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# A PROSPECTIVE RANDOMIZED STUDY COMPARING LAPAROSCOPIC BURCH VERSUS TVT. SHORT AND LONG TERM FOLLOW-UP

#### Aims of Study

To report short and long-terms results of a prospective randomized laparoscopic Burch vs TVT for the treatment of stress incontinence (GSI).

### **Methods**

Since January 1999 to January 2003 we performed 66 LB and 67 TVT. In the LB group the mean age was 51years (range 38-65), mean body weight 73 Kg.(range 48-88), mean parity 2,5 (range 1-5), menopause 38 (57,5%), while in the TVT group the mean age was 53years (range 37-72), mean body weight 70Kg. (range 46-84), mean parity 2,3 (range 1-4), menopause 19 (28,3%). All pts. preoperativelly underwent a complete urogynaecological work-up (Q tip test, Vaginal profile, Pad test, Urodynamic investigation and Urethrocystoscopy). All the pts. showed S.U.I. mean grade II (according to Ingelman Sundeberg) and urethra hypermobile. The surgical precedure was carried out under epidural anaesthesia for TVT and general for LB. Post menopausal pts were taking systemic or local estrogen therapy. We introduced in the study patients that never underwent a previous surgery for GSI. The choice of the patients to treat with Burch or TVT was casual. In the study we excluded pts. that needed an additional surgical procedure to repair coexisting pelvic floor defects.

#### Results

There were clinical differences between the two methods: procedure time was 1-1,5 h for LB and < 30 min for TVT, hospitalization was 2 days and 1 day respectively, anaesthesia was general for LB and local for TVT, invasiveness mini for LB and micro for TVT, learning curve: 6 months training for LB and 15 days for TVT. Complications: 2 (3,3%) cases of hematoma Retzius in LB and 3 (4,4%) bladder perforations in TVT. Blood loss was absent in both methods. The Foley catheter was removed 3-4 h after procedures in both groups while in the patients with bladder injuries we put on indwelling catheter for 2 days. At 3 months follow-up all patients were completely dry. At 6-36 months follow-up in the TVT group 63 (94%) were continent, 3 pts. (4%) were significantly improvement, only 1 (1,5%) failed. In the LB group 60 (91%) were continent, 2 (3,1%) was significantly improvement, 5 pts. (7,5%) failed. In the TVT group we found 3 pts (4,5%) with de novo instability and in the LB group, we found 2 pts (3%) with de novo instability at the post-operative follow-up.

## **Conclusions**

The mean hospital cost of TVT is lower than the one of LB. The learning curve for the surgeons is longer for the LB. There is a different cost-effectiveness between the two form of management: TVT has to be considered more cost-effectiveness than LB. Anyway the immediate results for both procedures at long follow-up are encouraging.