Do coexistent overactive bladder symptoms affect the outcome of single-incision sling in women with urodynamic stress incontinence?

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Objective: To explore whether preoperative overactive bladder (OAB) symptoms affect the outcome of single-incision slings (SIS) for urodynamic stress incontinence (USI).

Materials and Methods: This retrospective study involved 106 patients with stress urinary incontinence (SUI) treated with Solyx (n = 57) or I-Stop mini (n = 49) sling. 39.6% (n = 42) of patients had OAB symptoms before surgery. The primary outcomes were the cure rate of USI and the incidence of postoperative OAB in patients with or without OAB symptoms, as assessed by one-hour pad test, urodynamics, self-reported urogynecological questionnaires, and clinical examination. The secondary outcome was to compare the surgical results of the Solyx and I-Stop mini.

Results: The mean follow-up was 25 months. After surgery, USI in 15 cases (14.2%), SUI occurred in 10 cases (9.4%), and OAB in 19 cases (17.9%). Compared with SUI-alone group, the incidence of postoperative OAB in the SUI with OAB group was significantly increased (31.0% vs. 9.4%), but there was no significant difference in the subjective cure rate (85.7% vs. 93.8%) and objective cure rate (88.1% vs. 84.4%) of SUI between the two groups. Both Solyx and I-Stop mini slings had high cure rates for SUI and OAB, and improved quality of life, but these improvements were not statistically different between the two procedures.

Conclusions: Preoperative OAB symptoms did not reduce the cure rate of solyx or I-stop mini surgery for USI, and more than half symptoms were relieved postoperatively. Both Solyx and I-stop mini are effective and safe anti-incontinence procedures.