

## SUITABILITY OF CONCOMITANT SURGICAL TREATMENT OF GENITAL PROLAPSE AND ASSOCIATED OCCULT STRESS URINARY INCONTINENCE

### Hypothesis / aims of study

In view of the pathophysiology of pelvic floor defects, it is easy to understand that dystopia or prolapse should be investigated in close connection to stress urinary incontinence (SUI), as both have a common pathophysiology: weak pelvic floor support. It seems clear that a patient with prolapse plus manifest SUI should be treated for both concomitantly. An issue arises, however, in a subgroup with pelvic organ prolapse and occult stress urinary incontinence (OSUI) (i.e., UI only seen when prolapse is manually reduced in the consultation). What is the best approach? Should joint surgery be performed for both problems or should only prolapse surgery be done in the hope that reconstruction of the pelvic floor anatomy will also correct the latent stress incontinence with no need to add an anti-incontinence technique? At present, the problem remains unresolved and various clinical trials are in progress, in an attempt to clarify this issue. The aim of this paper is to review the literature on a problem often encountered in clinical practice: should an anti-incontinence technique be added in patients with occult urinary incontinence who undergo surgery for pelvic organ prolapse?

### Study design, materials and methods

We reviewed various articles for and against combined surgery. The issue may lie in the lack of consensus regarding the diagnosis of occult urinary incontinence and, therefore, the fact that the condition is not postoperative urinary incontinence. The other main issue is the lack of homogeneity in the studies, which mix various surgical techniques that are not always comparable

### Results

**Arguments in favor of combined treatment:** The incidence of patients who require surgery for SUI after prolapse repair varies according to the reference, from 22% to 7.5%. The latter concluded that 64.7% of women with a positive pessary test not offered TVT eventually developed UI. Authors in favor of treating the conditions together argue that this would avoid early repeat surgery for both prolapse and SUI, even though postoperative obstruction rates are higher. Still other authors argue that concomitant treatment is compatible and does not compromise vaginal repair. The last clinical trial concluded that placement of prophylactic TVT concomitantly with pelvic organ prolapse yields better 3- and 12-month outcomes in terms of the percentage of postoperative continence. For every 6 women who undergo prophylactic TVT, 1 case of UI is avoided with no serious or unexpected side effects.

**Arguments against combined treatment:** Authors against combined treatment say that combined repair compared to prolapse repair alone does not affect the rate of subsequent UI, although it appears to increase lower urinary tract symptoms. Other authors feel that the benefits of combined treatment are unclear and argue that when using a urodynamic study to diagnose urinary incontinence, the risk of reoperation secondary to obstruction is the same as the risk of surgery secondary to SUI. Other authors also report on the complexity of the diagnostic methods and confirm that urodynamic testing is of low positive predictive value for reproducing the clinical findings of UI, as many patients with evidence of SUI in the physical examination do not show it later in the urodynamic study. Other authors point out that more aggressive techniques can be used for prolapse reduction for an OSUI diagnosis in women with total vaginal eversion, but that this may yield more false positives due to excessive flattening of the posterior urethra-vaginal angle. Actually, the problem of SUI diagnosis is difficult: there is no consensus on the significance of OSUI. Some authors, such as , state that anti-incontinence surgery concomitant to prolapse correction may be "effective" but often unnecessary. Another argument against the combined procedure is the rate of potential complications of the anti-incontinence techniques we use (TVT, TOT). . **Considerations to take into account:** Another article reviewed introduced an interesting concept: OSUI does not correlate well with postoperative SUI (PSUI) and described different incidences: 27% to 38% for OSUI, compared to 17% for PSUI. It is true, of course, that patients with OSUI have a 20% higher risk of PSUI, compared to those with previous negative test. Identifying patients who would benefit from combined treatment would require an evaluation of the validity of preoperative tests. The authors mention several potential explanations for these outcomes: 1) the preoperative test is inadequate (prolapse repositioning with a speculum or forceps can cause UI) or 2) prolapse repair could function as anti-incontinence surgery. These authors propose a coughing test during repositioning can be done to identify prolapse patients with OSUI, followed by a urodynamic study only in patients with positive clinical tests. The complexity of diagnosis and surgical decision-making can explain, as some authors suggest, that the rate of repeat surgery in patients operated for pelvic organ prolapse and urinary incontinence is 17%, a level which is unacceptably high. Another important consideration is the lack of homogeneity among publications. For others the problem is that only a few studies have been performed, and the few that exist are too heterogeneous. According to this author, a multifactorial analysis should be performed and should include: 1) type of the prolapse repair, 2) type and technique of anti-incontinence treatment and 3) distinguishing between 2 different clinical situations, namely, previous SUI symptoms –demonstrable by testing or urodynamic study– or occult UI. Additionally the following should be compared in these subgroups: 1) the incidence of SUI or urge UI, 2) the rate of postoperative obstruction and 3) the need for reoperation.

### Interpretation of results

For, preoperative counseling is essential: patients with no UI symptoms should be informed that the risk of developing SUI is 10% to 50%. These patients should be given an explanation of prophylactic surgery and sling complications (e.g., secondary obstruction urge: 5.9% to 25% in retropubic slings). Although lower rates are obtained with the transobturator procedure, urinary retention and impaired voiding is 0% to 15.6%, depending on the author. The recurrence rate for SUI is 10%. Some authors recommend an algorithm

### Concluding message

Based on all arguments put forward, we consider that a definitive answer cannot yet be given to our question, given the heated controversy at this time. It seems prudent to explain the various options, as shown in Figure 1, to patients and involve them in the decision-making process, taking into account the special characteristics and expectations of each patient.

### References

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