Utility of invasive urodynamics before surgery for stress urinary incontinence: response to correspondence

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We thank Sanne van Leijssen et al. [1] for their comments on our editorial [2]. They point out that we did not include the Value of Urodynamics before Stress Urinary Incontinence Surgery (VUSIS) II study in our editorial; unfortunately, however, the VUSIS II study also used a design that is unfit for evaluating the value of invasive urodynamics (IUD). The hypothetical example below illustrates why we find the study design unfit.

If a group of doctors were convinced that standard treatment with a standard dose of an ACE inhibitor to all patients is the best prevention of stroke, regardless of blood pressure, they could convince themselves that they are right with the following randomized study. One group was treated according to the doctor's choice based on office evaluation alone and the other group was also treated according to the doctor's choice, but this group had both office evaluation and their blood pressure measured. As the doctors were convinced that the ACE inhibitor in a standard dose was always the best treatment, the patients in the two groups would end up with exactly the same treatment and the results would be the same in the two groups. The "surprising" conclusion would be that measurement of the blood pressure has no value in the prevention of stroke; the result is inborn in the design.

The three recent randomized control studies [3–5] based on doctors' choice have demonstrated that the group of clinicians involved did not actually use urodynamics in their decision-making and essentially all patients ended up with a midurethral sling. Therefore, the negative outcome is given in advance (whether valid or not) because of the design. Consequently, the results are not generalizable and cannot be

extrapolated to other doctors/centers. If the studies, on the contrary, were performed by doctors who strongly believed in IUD and based their choice of treatment on IUD alone, it would be expected that the result in the IUD group would be either better or worse than in the group without IUD, depending on whether the doctors' theory was right or wrong.

At the moment we do not know what the best treatment is for "uncomplicated stress incontinence" with the urodynamic findings of detrusor overactivity (DO) or impaired voiding efficiency. The VALUE/VUSIS studies may lead clinicians to believe that a standard midurethral sling will always be a successful treatment, which is not necessarily true. The three randomized controlled studies were not designed to answer these questions.

We appreciate the supportive and inspiring comments from Dr. Petros [6].

Conflicts of interest None.

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