

Summary

This PhD-thesis is based on three original papers. The studies were performed during my employment at Department of Obstetrics and Gynecology, Glostrup section, Herlev Hospital.

The prevalence of bothersome urinary incontinence (UI) in Danish women is 16%. The most frequent type is stress incontinence either alone or in combination with urge incontinence. Stress incontinence is most effectively treated surgically. Through the last decade surgical treatment of urinary incontinence has undergone a paradigm shift towards minimally invasive procedures.

The aims of this thesis were:

- I. To study the activity, organisation and aspects of quality of surgically treated stress urinary incontinence in Denmark in a 3-year period (2001-2003) based on data from the Danish National Patient Register (DNPR).
 - II. To assess subjective cure, satisfaction and complication rates 4 years after surgical treatment (2001) with a mid-urethral sling using a questionnaire to all Danish women involved.
 - III. To describe the clinical practice and attitudes among Danish incontinence surgeons in 2006-2007 by means of a questionnaire.
- Data were extracted from the DNPR in collaboration with the Danish National Board of Health (NBH) and supported by operation chart descriptions and discharge letters from women who had been re-admitted within 30 days after primary operation or had had prolonged hospital stays.

In total 2,678 incontinence operations were performed during the 3-year period at 51 different departments. Postoperative complication frequency was 40% after abdominal procedures, 11% after mid-urethral sling (MUS) operations and 2% after urethral injection therapies. As for abdominal procedures, "high" volume departments (>45 operations/3 years) had significantly fewer complications than "low" volume departments (<15 operations/3 years), while no difference was shown in the MUS group.

- All Danish women surgically treated with a MUS in 2001 received a questionnaire 4 years after surgery. Questions comprised subjective cure, satisfaction and complications.

In total, 335 (92%) women responded to the questionnaire. Among the responders 105 (32%) felt completely cured, 119 (36%) much improved, 55 (17%) improved and 48 (15%) unchanged or worse. Women operated at low volume departments (<10 operations per year) had a significantly lower subjective cure rate compared to women operated at high volume departments. Altogether 238 (73%) of women were very satisfied with their operation. Bladder emptying difficulties were reported by 103 (32%) women and the need for Clean Intermittent Catheterization (CIC) was reported by 21 (7%). No women were still performing CIC.

- All surgeons performing surgical treatment of urinary incontinence received a questionnaire in 2007.

Questions comprised: type of operation, type of sling used in 2006, and attitudes towards learning and maintaining routine as regards incontinence operations. In total 63 responded (71%) of whom 49 performed incontinence surgery. Tension-free Vaginal Tape (TVT) was the preferred operation. Twenty (41%) used only TVT, whereas 7 (14%) used only Trans-Obturator Tapes (TOT) and 15 (31%) used both TVT and TOT. In total 10 different slings had been used. Most surgeons agreed that it takes 10-25 incontinence procedures to learn the procedure and more than 10 operations per year to maintain routine. NBH recommendations on referral of patient to tertiary centres were always followed by 15 (30%).

In conclusion:

- The organisation of surgical treatment of urinary incontinence in Denmark is very decentralised with many low volume departments and low volume surgeons which seems to affect quality.
- Crude outcome of surgical treatment of UI with MUS seems comparable to international results.
- Practice and attitudes among incontinence surgeons vary considerably and NBH recommendations are not always followed.