

## **OPEN RETROPUBIC COLPOSUSPENSION FOR THE TREATMENT OF URINARY INCONTINENCE : A SYSTEMATIC REVIEW**

### **Aim of Study**

This systematic review aims to assess the effects and safety of open retropubic colposuspension for the treatment of urinary incontinence.

### **Methods**

The authors searched the Cochrane Incontinence Group specialised register (to April 2002) and reference lists of relevant articles. Investigators were contacted to locate extra studies. Randomised or quasi-randomised controlled trials in women with symptoms or urodynamic diagnoses of stress or mixed incontinence that included open retropubic colposuspension surgery in at least one arm of the study were reviewed. Studies were evaluated for methodological quality and appropriateness for inclusion. Data were extracted by two of the reviewers. Trial data were analysed by intervention according to pre-specified outcomes. Where appropriate a summary statistic was calculated.

### **Results**

This review included 33 trials with a total of 2403 women randomised into the different treatment groups. The results showed overall cure rates of about 69% to 88% for open retropubic colposuspension. Evidence from two studies suggested open retropubic colposuspension is better than conservative treatment in terms of cure rates. Evidence from six trials showed a lower failure rate for subjective cure after open retropubic colposuspension than after anterior colporrhaphy (RR of failure 0.51; 95% CI 0.34 to 0.76 before the first year, RR 0.43; 95% CI 0.32 to 0.57 at one to five years, RR 0.49; 95% CI 0.32 to 0.75 in periods beyond 5 years). In comparison with needle suspensions there was a lower failure rate after colposuspension in the first year after surgery (RR 0.66; 95% CI 0.42 to 1.03), after the first year (RR 0.56; 95% CI 0.39 to 0.81) and beyond 5 years (RR 0.32; 95% CI 0.15 to 0.71). Evidence from three trials found no significant difference in the risk for failure between the use of suburethral slings and open colposuspension within one year of treatment and at 1-5 year follow-up. Patient-reported cure rates in short-, medium- and long-term follow-ups showed no significant difference between open and laparoscopic retropubic colposuspension. The combined results from two trials indicated that women treated with the Burch procedure were less likely to fail (RR 0.38 95% CI 0.18 to 0.76) at 1-5 year follow-up compared to those treated using the Marshall Marchetti Krantz procedure.

In general, the evidence available does not show a higher morbidity or complication rate with open retropubic colposuspension, compared to other surgical techniques. There is, however, a greater risk for postoperative pelvic organ prolapse when compared with anterior colporrhaphy and sling procedures.

### **Conclusions**

The evidence available indicates that open retropubic colposuspension is the most effective treatment modality for stress urinary incontinence especially in the long term. Newer minimal access procedures like tension free vaginal tape look promising but their long-term performance is not known. Laparoscopic colposuspension should allow speedier recovery but its relative safety and effectiveness is not known yet.