239

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SURGERY FOR RECURRENT STRESS INCONTINENCE IN THE UK 2007-2015

Hypothesis / aims of study

10 to 40% women have recurrent or persistent SUI after surgery[1]. Clinicians base their treatment choice on clinical experience and personal preference as little evidence exists to guide them on which secondary treatment is “best”. Relevant systematic reviews presented limited evidence[2,3]. No randomised controlled trials (RCT) solely recruited recurrent cases. Subgroup analysis of RCT data was inconclusive for comparisons between retropubic and transobturator MUT, or between MUT and colposuspension. Data from non-randomised studies suggest cure rates of 73% and that retropubic MUT is more effective than transoburator[12]. We examined the British Society of Urogynaecology (BSUG) database records for treatment given for recurrent stress incontinence and to compare outcomes.

Study design, materials and methods

Data from 2007-2015 were obtained from the BSUG database committee. After data cleaning, previous surgery patterns were compared by year, and outcomes compared by operation. Group comparisons were by Chi Square and numerical comparisons by appropriate non-parametric tests.

Results

2,938 records were obtained. 269 cases were not previous continence surgery cases leaving a final cohort of 2,669, although 231 had no details of previous surgery. Median age was 59 years (20-88), with median BMI 28.4 (17.8-60.6). 2,164 (88.8%) had one previous procedure, (207) 8.5% had two, 53 (2.2%) had three, and 14 (0.6%) more than three. The first procedure was most commonly retropubic tape (28.6%), colposuspension (24.5%), transobturator tape (17.4%) or bladder neck injection (14.3%).

Pelvic floor exercises were offered to 76.2% women overall. 96.2% women had urodynamic investigation performed: 76.5% women had urodynamic stress incontinence, 18.6% had mixed incontinence, 0.7% had detrusor overactivity, and 3.4% had a normal investigation. Median annual procedures were 273 with a non-linear increase across the years peaking at 500 in 2013.

Midurethral tape (MUT) was most common (77.3%), followed by bladder neck injections (BNI) (10.2%) and colposuspension (5.7%). From 2012 colposuspension and fascial sling were performed more often; fascial slings increased from 1.6% to 10.9% cases ($p<0.0001$).
Follow details were available for 1,763 (66.1%) women. 89.2% women had an outpatient follow up at 6 weeks for 649 (37.4%), three months for 667 (38.5%) and six months for 354 (20.4%). Outcome data were poorly reported. Median ICIQ-UI SF score (882 women (33.0%)) fell from 16 (0-21) to 0 (0-21) (621 women (23.3%) ($p<0.001$). Patient Global Impression of Improvement (PGI-I) data were available for 1,616 (60.5%) women; 1,319 (81.6%) were “much better” or “very much better”. “Change in stress incontinence” data were available for 1,499 (56.2%) women. Of these, 993 (66.2%) were “cured” and 344 (22.9%) “improved”. Both PGI-I scores ($p<0.001$) and “change in stress incontinence” ($p<0.001$) differed by surgery type, with midurethral tapes, colposuspension and fascial sling more likely to achieve cure or major improvement than bladder neck injection.

Interpretation of results

MUT and bladder neck injections were the most common procedures for repeat SUI but treatment patterns have changed in the last 8 years. Follow up data in the BSUG database are incomplete but suggest MUT, colposuspension and fascial sling are superior procedures.

Concluding message

Recurrent SUI remains a therapeutic challenge. These data suggest that repeat MUT, colposuspension or autologous fascial sling are the best options. However, low completion rates for outcomes mean these conclusions must be tentative, and robust prospective data are needed to provide evidence to guide treatment decisions.

References

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Disclosures

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