Hypothesis / aims of study

The aim of the study was to observe the changing trends in the surgical management of female stress incontinence in Scotland between the years 1989 – 2008 and provide a critical appraisal for the observed trend.

Study design, materials and methods

The International classification of disease (ICD) code was used to identify female patients with stress urinary incontinence. Hospital episode statistics were compiled from all NHS hospitals within Scotland between the years 1989 – 2008. Operation codes for incontinence procedures were then analysed and the trends observed. A review of the literature was conducted to search for evidence to support the observed trends.

Results

Between 1989 and 2008 the number of procedures undertaken for female stress urinary incontinence in Scotland has doubled from 800 to 1500 per year. The Burch Colposuspension was the most frequently performed procedure between the years 1989 - 2000. Over the same period, alternatives to the Burch included vaginal buttressing, abdomino-perineal suspension of the urethra and the Retropubic suspension of the urethra but these represent less than a third of the total procedures performed. The introduction of the Tension-free Vaginal Tape (TVT) in 1999 produced an abrupt change in practice with the rapid disappearance of previously employed clinically effective techniques. Since 1999 incontinence has almost exclusively been treated by suburethral taping techniques. The introduction of the Tension-free Vaginal Tape Obturator (TVTO) in 2005 had a rapid uptake and current data suggests that the TVT and TVTO are now almost exclusively the only procedures used to treat female stress urinary incontinence.
Interpretation of results

The number of procedures undertaken for female stress urinary incontinence is increasing over time. There have been a number of procedures adopted in the past but incontinence is now being treated exclusively by suburethral taping procedures. The almost instantaneous uptake of these procedures might suggest that these are far superior to previously employed techniques in terms of clinical outcome and operating efficiency. However it may also suggest that inadequate time has been spent conducting high quality randomised trials to compare the various techniques before they have been adopted.

Concluding message

The treatment of female stress urinary incontinence has seen many procedures come and go. The rapid transition from the Burch Colposuspension to suburethral taping procedures in particular has been dramatic. There is a lack of quality research to prove that one technique is superior to another and the observed trend could be explained by commercial marketing and the reduced need for major surgical intervention.

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