

## THE CHANGING FACE OF URINARY CONTINENCE SURGERY IN THE UNITED KINGDOM: A PERSPECTIVE FROM THE HOSPITAL EPISODE STATISTICS (HES) DATABASE

### Hypothesis / aims of study

To investigate changes in surgical practise in the treatment of functional urology procedures in particular those related to stress, urge and post prostatectomy incontinence.

### Study design, materials and methods

The Hospital Episode Statistics (HES) database is an administrative data set recording all hospital admissions and procedures in England. Public domain information from this database was interrogated for evidence of change in the utilisation of various operative procedures for urinary incontinence from 2000 to 2012. A specific 4-character code for the following procedures, M52.3, M53.6, M53.3, M36.2, A70.1, M49.5, M43.4, M53.4, M53.5, M53.7, M55.2, M64.2, M56.3, was plotted against time to demonstrate trends in surgical practise.

### Results

The results for the surgical procedures were grouped based according to their use for the treatment of stress, urge or post prostatectomy incontinence.

For stress incontinence surgery a general increase in the use of synthetic mid urethral tapes such as TVT and TVTO was observed, whilst there has been a significant decrease in colposuspension procedures in the same time frame (see figure 1). In addition, codes for partial removal of TVT and TVTO have also steadily increased in recent years.

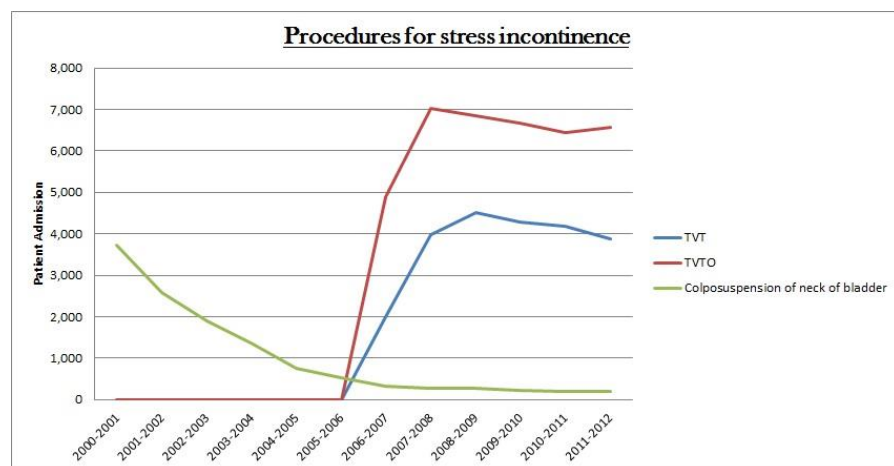


Figure1: Trends in stress incontinence procedures 2000-2012

Procedures codes related to overactive bladder have shown a significant increase in the use of botulinum toxin-A (figure 2) and an increase in the use of neuromodulation. This has coincided with a steady decline in operative codes related to clam ileocystoplasty.

There has been a gradual increase in the insertion of artificial urinary sphincters in men related to post prostatectomy incontinence.

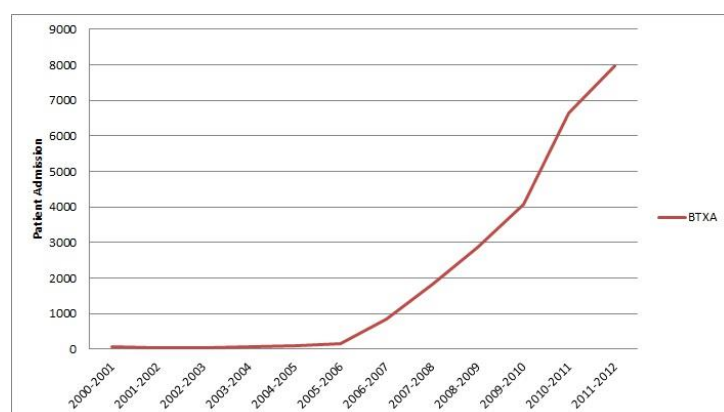


Figure 2: Trends in the use of botulinum toxin-A to treat overactive bladder and detrusor overactivity

#### Interpretation of results

In the last decade the introduction of synthetic mid urethral tapes has changed the way stress incontinence in women is managed. Due to their ease of insertion and short hospital stay they have superseded other operations as the procedure of choice. In addition due to tape related complications such as erosion there are increasing procedure codes related to their removal (at least in part) in the last 5 years. Similarly with the introduction of botulinum toxin-A as a minimally invasive treatment for overactive bladder and urge incontinence the number of clam ileocystoplasty procedures has reduced. Finally with the advent of PSA testing and more rigorous case finding more radical prostatectomies are being performed by open, laparoscopic and robotic techniques. This may therefore lead to an increase in post prostatectomy incontinence seen and thus more insertions of artificial urinary sphincters in men.

#### Concluding message

Mid urethral synthetic tapes appear the mainstream treatment of stress incontinence in women but tape related complications have led to an increase in procedures to remove these devices. The uptake of botulinum toxin-A and sacral neuromodulation has led to less clam ileocystoplasty procedures being performed. There are limitations to results sourced from HES with potential inaccuracy of coding, however this data supports the trends observed by experts in this field.

#### Disclosures

**Funding:** AS MK and PD have previously been investigators for Allergan Ltd AS has spoken on behalf of Astellas and Allergan Ltd AS has received unrestricted educational grants from Allergan Ltd **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** freely available data from the NHS in the UK **Helsinki:** Yes **Informed Consent:** No