

## **INFLUENCE OF TVT UPON URINARY RETENTION AND THE NEED TO LEARN SELF-CATHETERISATION**

### **Aims of Study**

In the last five years the advent of tension free vaginal tape has revolutionised the surgical management of urodynamic stress incontinence, with the option of a minimally invasive procedure offering rapid return to work and normal activity with minimal complications<sup>1</sup>. The published data suggest very similar success rates, with low rates of the recognised complications associated with colposuspension (voiding difficulty, detrusor overactivity and prolapse). We conducted an audit of the activity of the urogynaecology services unit in our hospital to identify any indirect benefits of the changing patterns of surgery over this time period.

### **Methods**

The case notes of all patients referred for the teaching of clean intermittent self catheterisation (CISC) for voiding dysfunction between April 2000 and March 2002 were reviewed. The indication for referral was recorded and for the purpose of this analysis was subdivided into one of 6 categories: after colposuspension (alone or with other procedure); after TVT (alone or with other procedure); after injectable treatment; after other gynaecological surgery; postnatal retention, and other (secondary to drug therapy, or training prior to surgery). Comparison of the number of patients in each group was made between the two years included in the survey. The number of colposuspensions and TVT insertions (alone or with other procedures) performed in each year from 1999-2002 was obtained from the theatre records, and the referral rate per procedure was calculated.

### **Results**

The number of colposuspensions fell from 75 to 37 (71% of all continence procedures, to 29%), reflected by an increase in the number of TVTs from 4 to 74 (4% to 57%) in the same period. 63 patients were referred for CISC, 41 from 2000/2001 and 22 from 2001/2002. 25 patients (61% of referrals) in the first year had colposuspension compared to 9 (40.9%) in the second year (difference 20.1%, 95% CI -5.8, 45.9). 3 patients (7.3%) in the first year had TVT compared to 1 (4.5%) in the second year (difference 2.8%, 95% CI -9.9, 15.4). There were no significant differences in the numbers of patients in the other groups between the two years. The proportion of colposuspensions requiring CISC fell from 43.8% to 24% (difference 19.5%, CI -0.3, 39.4), and the proportion of TVTs requiring CISC fell from 17.6% to 1.4% (difference 16.3%, CI 5.5, 27.1).

### **Conclusions**

The increasing frequency of TVT as a continence procedure was reflected in a fall in the number of patients requiring CISC. This fall was composed of a difference in the absolute incidence of voiding dysfunction after TVT compared to colposuspension, but also by a fall in the rate of CISC referral for each procedure in the second year of analysis. This fall was statistically significant for TVT, but not so for colposuspension, a finding which may represent a learning curve effect.

The indirect cost savings associated with TVT may be extrapolated to cover issues such as the teaching of CISC, which increase the relative benefits of TVT over colposuspension.

### **References**

1. Ward K, Hilton P. Prospective multicentre randomised trial of tension-free vaginal tape and colposuspension as primary treatment for stress incontinence. *BMJ* 2002;325:67-70.