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# FEMALE VOIDING DYSFUNCTION: A TERTIARY CENTRE EXPERIENCE

## Hypothesis / aims of study

Female voiding dysfunction is a difficult clinical problem. A primary disorder of sphincter relaxation (Fowler's syndrome) may underlie voiding dysfunction in some women(1). This is important to identify as sacral nerve stimulation (SNS) works well in these cases. (2,3) This can be offered as an alternative to long-term catheterisation which may otherwise be the only option of management.

The aim of our audit was to review the demographics of patients referred to our department over 5 years and their subsequent investigations, diagnosis and management.

## Study design, materials and methods

This was a retrospective audit of women referred with urinary retention between 1/2001- 12/ 2006. Demographic details included referring practitioner and location, age, ethnic origin and employment status were reviewed. Details of previous management and disease presentation were reviewed along with our management strategy and subsequent diagnosis and treatment. This data was combined with data from a previous audit of patients referred from 2001-2004. Results

There were 392 women referred: 67% had partial and 33% had complete retention. The mean age was 35 (12-81) yrs. All but 6 were white Caucasian. Analysis of the 2005-6 group (n=144) showed the average duration of symptoms before referral was 67 (6-334) months. The mean urinary residual was 1217 (500-2500)mls. 30 had a previous urethral dilatation with minimal benefit. Associated medical disorders are shown in Table 1. 11 (7.6%) women were on opiates for pelvic pain. The presenting symptoms were acute retention in 45 (31%), chronic retention/poor flow in 61 (42%), postoperative retention in 15(10.5%), postpartum retention in 19(13.5%) and recurrent UTIs in 4 (3%). In total 288 women had investigations. 90 patients had an abnormal urethral sphincter EMG and their mean max. urethral pressure was 102(80-165)cmH<sub>2</sub>0 and mean sphincter volume was 2.12(1.2-3.7)cm.<sup>3</sup> Fowler's syndrome was diagnosed in 197(52%).40 patients had SNS with restoration of voiding in 29 (72%).

Table 1-Medical history

Medical history	No(%)
Chronic pelvic pain	27(19%)*,
Polycystic ovaries	8 (5%)*
Endometriosis	18 (12.5%)*
Premenopausal hysterectomy	7(5%)*
Constipation	22(6%)
Chronic intestinal pseudo-obstruction	9 (2%)
Unexplained neurological symptoms	17 (12%)*

\* data only available for 2005-6 cohort

## Interpretation of results

The majority of women referred with voiding dysfunction present with partial not complete retention. Most of these have been undiagnosed for many years. In those with a high urethral sphincter EMG (diagnostic of Fowler's syndrome) the urethral pressure profile and sphincter volume were markedly raised.

### Concluding message

Specialist investigation of women with urinary retention reveals Fowler's syndrome in ~50%. There was a high prevalence of pelvic pain and endometriosis in these women and further work is required to evaluate any causation. Recognition of those suitable for SNS is important as this has a good success rate for restoration of voiding and this may be offered as an alternative to long- term catheterisation.

No funding was obtained for this study and no ethical approval was required.

References

- 1. BJU Int. (2006) 97;28-7.
- 2. Curr Opin Urol (2003) 13;293-9..
- 3. BJU Int (2004) 94;335-7.

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HUMAN SUBJECTS: This study did not need ethical approval because This was an audit. but followed the Declaration of Helsinki Informed consent was obtained from the patients.