

CAN PRE-OPERATIVE MRI PREDICT NEW ONSET URODYNAMICALLY PROVEN STRESS URINARY INCONTINENCE (USUI) POST EXCISION OF FEMALE URETHRAL DIVERTICULUM.

Hypothesis / aims of study

To assess the ability of pre-operative MRI characteristics to predict new onset USUI following excision of urethral diverticulum in females.

Study design, materials and methods

Review of a prospectively gathered database of all female patients having excision of a urethral diverticulum and comparison of their pre-operative MRI classification and characteristics with the post-operative incidence of new onset USUI.

Results

: 70 women mean age 46.5 years (range 24–77) had excision of urethral diverticulum with Martius Fat Pad Interposition between 2002 and 2015 –and had preoperative MRI available for review and VCMG.

29 women had preoperative USUI and were excluded. The remaining 41 women of mean age 44.6 years (range 24–73) did not have pre-operative USUI and their details are listed in Table 1:

	No Post Op USUI	Post Op USUI 12m
Number	31 (76)	5 (12)
Simple N (%)	5 (17)	1 (20)
Horseshoe N (%)	16 (52)	1 (20)
Circumferential N (%)	10 (32)	3 (60)
Mean Transverse Diameter (mm)	28	28
Mean Coronal Diameter (mm)	25	31
Mean Sagittal Diameter (mm)	29	29
Loculated (%)	89	60
Degree of Urethra Surrounded by Diverticulum	256	298
Mean Os Distance to Meatus (mm)	20	17
Mean Os Distance to Bladder Neck (mm)	18	21
Length of Urethra	37	38
Mean Age Years	43	49

Interpretation of results

Pre-existing USUI is present in 41% of women having excision of urethral diverticulum. In the remaining 59%, new onset USUI occurs in 24% and persists at 12 months in 12%. There is a tendency for women with persisting new onset USUI to be older and have a larger degree of their urethra surrounded by their diverticulum but this does not reach statistical significance.

Concluding message

There is a high incidence of incontinence, especially in elderly.

Disclosures

Funding: Nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University College London Hospitals **Helsinki:** Yes **Informed Consent:** Yes