ONE NORMAL VOID AND RESIDUAL IS ALL THAT’S NECESSARY IN SELECTED PATIENTS WHO HAVE UNDERGONE MIDURETHRAL TAPE INSERTION.

Hypothesis / aims of study
Many units require two void and residuals check (V&R) following MUT surgery which may result in an overnight stay. With a greater demand for quicker hospital discharges, we examine whether one normal void and residual is safe.

Study design, materials and methods
Retrospective analysis of the V&R following MUT surgery alone or in combination with prolapse as part of wider audit of morbidity related to tapes. (audit approval obtained). Data on consecutive voids and residuals were collected as well as data related to pre-existing voiding difficulty in the form of pre-op high residuals or low Qmax. Our criteria for a normal post-operative void is >200mls with a residual <150mls or V:R of 2:1.

Results
235 notes were examined. Of these 188 had complete datasets. 60 of these (32%) had a first abnormal residual, and these patients therefore required further voids and residuals.
128 patients had a normal 1st void and of these 9 had an abnormal 2nd V&R (7.5%), the remaining 119 having a normal 2nd V&R (92.5%).
Of the 119 patients with 2 consecutive normal V&R, 9 had pre-op Qmax < 15mls/sec and 2 further patients had pre-op residuals >150ml with normal Qmax.
9 patients with a normal 1st V&R but abnormal 2nd V&R, 5 had a Qmax < 15, and 3 of these a pre-op residual >150mls. The remaining 4 had Qmax ≥15mls/sec with normal pre-op residuals. These 9 patients were all voiding satisfactorily at the 3 month review.

Interpretation of results
We consider 2 normal consecutive V&R to represent normal voiding (disease –ve).

If we adopt a policy of discharge after 1 normal V&R, so long as the pre-op Qmax ≥15ml/sec and the pre-op residual < 150mls, we will miss 4 patients out of the 128 (3.1% false negative rate) who had an abnormal 2nd V&R but had normal pre-op Qmax and residuals. We would also perform an unnecessary 2nd V&R in 11 patients (8.6% false positive rate), who actually had a normal 2nd residual but whose pre-op Qmax and residuals were abnormal [Diagram 1.]
This test has a sensitivity of 94.2% (65/69), specificity of 90.7% (108/119), PPV of 85.5% (65/76) and NPV of 96.4% (108/112) for detecting short term voiding dysfunction [Table 1].

Concluding message
From this limited data, a policy of discharge after MUT surgery after 1 normal V&R seems relatively safe so long as pre-op Qmax and pre-op residuals are normal. This will result in almost 2/3 of patients potentially being able to be discharged after a single V&R. However, any additional operative procedure may require the patient to stay longer. This small dataset needs corroboration from larger studies.

Table 1.

<table>
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<th>Disease</th>
<th>Disease</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td>Test</td>
<td>11</td>
<td>108</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>112</td>
</tr>
</tbody>
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Diagram 1.
235 notes

188 complete datasets

60 abnormal 1st V&R

128 Normal 1st V&R

119 Normal 2nd V&R

9 Abnormal 2nd V&R

9 Qmax <15
2 high pre-op residuals

4 Qmax >15
Normal pre-op residuals

5 Qmax <15

Disclosures

Funding: None  Clinical Trial: No  Subjects: HUMAN  Ethics not Req'd: This was part of a larger audit of morbidity related to tape surgery for which audit approval was granted.  Helsinki: Yes  Informed Consent: No