

## THE PENILE CUFF TEST: A NON-INVASIVE URODYNAMIC INVESTIGATION TO DIAGNOSE MEN WITH LOWER URINARY TRACT SYMPTOMS.

### Hypothesis / aims of study

Troublesome voiding lower urinary tract symptoms (LUTS) are a common problem in men and a multitude of methods have been applied to assess lower urinary tract symptoms (LUTS). Pressure flow studies still remain the gold standard for assessing bladder outlet obstruction. In this study we evaluate the clinical and urodynamic features in men with LUTS and to determine non-invasive parameters for predicting bladder outlet obstruction (BOO). We performed a non-invasive test to categorize voiding dysfunction in men complaining of lower urinary tract symptoms (LUTS) - the penile cuff test.

### Study design, materials and methods

A total of 67 patients **with** lower urinary tract symptoms underwent simultaneous invasive urodynamics pressure flow studies with bladder and abdominal catheter and noninvasive pressure flow studies with penile cuff. Average age was 60.5 years. We performed the test involves the controlled inflation of a penile cuff during micturition to interrupt voiding and estimate isovolumetric bladder.

### Results

**In 67 patients in invasive urodynamics study** 22 was no obstructed, 17 was mild obstructed and 28 was severe obstructed. In the penile cuff test there was correspondence in 87%.

### Interpretation of results

Non-invasive methods that measure isovolumetric bladder pressure by interrupting the urinary stream can reproducibly measure pressure and urinary flow, but are unable to determine the effects of abdominal straining during voiding and give no insight into urine storage symptoms. Also failed to differentiate obstruction from ipocontratility detrusorial.

### Concluding message

it is a simple test, non-invasive and good prediction to the diagnosis and treatment planning of men with LUTS.

<i>Specify source of funding or grant</i>	In this study we evaluate the clinical and urodynamic features in men with LUTS and to determine non-invasive parameters for predicting bladder outlet obstruction (BOO). We performed a non-invasive test to categorize voiding dysfunction in men complaining of lower urinary tract symptoms (LUTS) - the penile cuff test
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	it's no experimental
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes