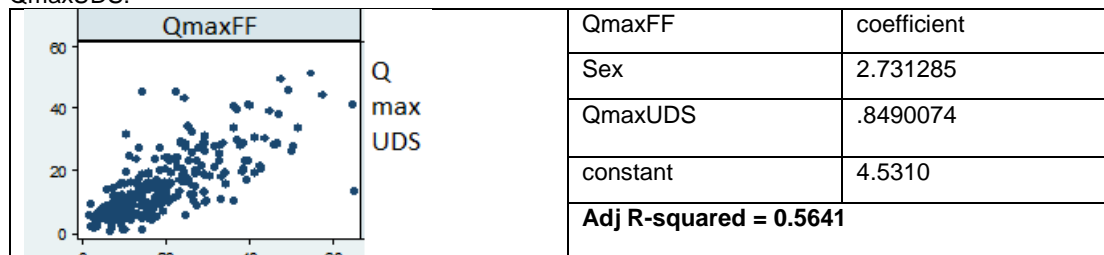


## THE EFFECT OF A 6 CH URODYNAMIC CATHETER ON MAXIMUM FLOW RATE OF PRESSURE/FLOW STUDY. DOES IT CAUSE ANY OBSTRUCTION?

**Hypothesis / aims of study:** To evaluate the effects of catheterization with an urodynamic catheter on the maximum flow rate of voiding cystometry (QmaxUDS) versus free uroflowmetry (QmaxFF).

**Study design, materials and methods:** In two hundred eighty patients (127 males, 153 females) who referred for complete urodynamic investigation, both free uroflowmetry and pressure-flow studies were performed. A 6 Ch urodynamic catheter (Medtronic®) was used for bladder filling and vesical pressure measurement. Urodynamic tests were performed according to "good urodynamic practice". The QmaxFF and QmaxUDS were statistically analyzed with single linear regression model, in order to identify any possible correlation. Sex was evaluated as confounding factor. The statistical package STATA 13 was used for the statistical analysis.

**Results:** Mean age (SD) of patients was 50.15 (17.35). We have explored the possible correlation between QmaxFF and QmaxUDS.



The following mathematical formula emerged: **QmaxFF = 4.5 + 2.7\*sex + 0.85QmaxUDS** (for sex: male = 1, female = 0), thus for males **QmaxFF = 7.2 + 0.85QmaxUDS** and for females **QmaxFF = 4.5 + 0.85QmaxUDS**.

The abovementioned model can explain 56% of the data variability.

### Interpretation of results

**Concluding message:** Although the 6 Ch urodynamic catheter supposed to be an acceptable means for reliable urodynamic investigation, a significant effect on QmaxUDS is noticed for males and for lower values of Qmax.

### Disclosures

**Funding:** No disclosures **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** is a retrospective study **Helsinki:** Yes **Informed Consent:** No