

**00029 Prospective Validation of a Novel Visual Analogue Uroflowmetry Score (VAUS) in 1000 Men With Lower Urinary Tract Symptoms (LUTS)**

*Raj Tiwari, Henry Ho, Ng Mei Ying*

Singapore General Hospital

**Aims:** Family physicians are increasingly involved in care of patients with LUTS, however are limited by lack of tools to monitor disease progression. In this large study, our primary aim was to further validate VAUS when correlated with uroflowmetry measured maximal flow rate (Q<sub>max</sub>), voided volume and International prostate symptom scores (IPSS) symptom scores. Secondary aim was to study the how VAUS fared at predicting poor flow (Q<sub>max</sub> <10ml/s) compared to age, voided volume and IPSS. Tertiary aim was to predict the best VAUS score as a cut off for poor flow.

**Methodology:** After IRB approval, 1000 patients were prospectively recruited. They had VAUS scores, uroflowmetry and IPSS performed. VAUS is a novel 5 point visual analogue scoring of urine flow, with 1 being the weakest and 5 the strongest Data was analysed using SPSS where spearman's correlation coefficient and logistic regression analysis was performed looking for significance. Receiver operating curves (ROC) curves were used to identify best VAUS cut off.

**Result:** 1000 patients were studied with mean age of 68.99(50 - 95). Mean Q<sub>max</sub> was 13.1 (2.9 - 44.9) ml/s, mean voided volume 231 (34 - 826)ml, mean IPSS symptom score was 10 (2 - 33) median VAUS score was 3(1 - 5). VAUS showed good correlation with Q<sub>max</sub> p < 0.001, voided volume p=0.006 and IPSS symptom score p<0.001. On multivariate analysis both VAUS and voided volume predicted poor flow significantly with p value of <0.001 and p=0.001 respectively. Age was not significant. IPSS symptom score of low and moderate range did not reach significance while severe range was correlated with p value 0.049. On ROC analysis VAUS score of 2.5 was identified as best value for predicting poor flow p value <0.001.

**Conclusion:** VAUS is a validated tool for monitoring of lower urinary tract symptoms in our patients showing significant correlation with uroflowmetry, voided volume and IPSS.