

LOW URINARY OBSTRUCTED PATIENTS DO NOT USE VALSALVA MANOEUVRE TO IMPROVE THEIR VOIDING PHASE: URODYNAMIC PROOF

Hypothesis / aims of study

Our objective is to verify in a cohort of obstructed men that the use Valsalva maneuver during the voiding phase do not improve Qmax.

Study design, materials and methods

From January 2014 to February 2016, we perform 195 urodynamic studies in men. To determine if Valsalva Maneuver was useful in obstructed men, we asked all men to perform two Valsalva manoeuvres, of at least five second each, while the contraction of the detrusor has been started after the order of micturition. Criteria's inclusion: IPSS ≥ 7 , and Qmax in the Free Qmax ≤ 10 ml/sec and exclusion criteria: urinary retention and Pdet < 40 cmH₂O in patients with a Qmax < 15 ml/sec during the urodynamic study (to avoid underactive bladder patients) were applied to the collected data. For the confirmation of the hypothesis we use the Wilcoxon signed rank test to compared the parameters obtained during the voiding phase of the urodynamic studies. We analysed: Qmax CW (as we called the Qmax with a 6 Fr catheter in the urethra during the voiding phase Without performing Valsalva), Qmax C Vals1 (the first value of Qmax with same catheter in the urethra in the voiding phase with in the Valsalva Maneuver) and Qmax C Vals 2 (same as Qmax C Vals 1 but in the second Valsalva maneuver also during the same detrusor contraction). Then Qmax CW were compared to all Qmax C Vals 1, and with Qmax C Vals2 to find the statistic relations between them.

Results

For both correlation of samples, as shown in table 1, the p value was 0.000%, rejecting the null hypothesis, so that confirms the difference obtained between: Qmax CW, and Qmax C Vals 1 and Qmax C vals2 are not due to chance alone, with a confidence range of 95%.

Interpretation of results

We can confirm that obstructed men, with a normal contractile detrusor, do not improve their Qmax during the voiding phase by using the Valsalva maneuver.

Concluding message

In this original work, an exhaustive an methodical analysis of the obtained data through two years was useful to demonstrate that performing Valsalva during micturition do not improve Qmax in obstructed patients. Further analysis with more data that was collected during this study will be informed.

	Qmax C Vals 1 – Qmax CW	Qmax C Vals 2 - Qmax CW
Z	-5,384 ^a	-5,197 ^a
p	,000	,000

a. Based on positive ranks.

References

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Disclosures

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