

OP28

AWAKE VS ASLEEP URETHRAL PRESSURE PROFILE (UPP) IN WOMEN WITH VOIDING DYSFUNCTION

M. Imran, A. Snook, K. Kapriniotis, M. Thommypillai, H. Yasmin, K Aleksejeva, R. Axell, R. Nobrega, A. Noah, H. Gresty, J. Ockrim, T. Greenwell, A. Mercado-Campero, M. Pakzad

Introduction:

During UPP in women, the expected MUCP (eMUCP) is calculated using the Edwards-Malvern Equation ($=92-\text{Age}$). However, this equation provides a cut-off value for predicting a "weak urethral sphincter" with 66% of accuracy [1]. Values over the eMUCP are usually considered as high and associated with functional bladder outlet obstruction (BOO). However, a definition of normal upper limit of MUCP is still lacking. Historically, MUCP in patients with Fowler's syndrome (FS) is usually described as $>100\text{cmH}_2\text{O}$ [2]. These patients usually find UPP and self-catheterisation to be particularly uncomfortable. In fact, it is not always possible to perform a UPP in patients with suspected FS. Our aim was to compare the pre-operative MUCP (awake) with intra-operative (asleep) MUCP in a small cohort of women with voiding dysfunction as part of a quality improvement project (QIPP).

Methods:

Four consecutive female patients with voiding dysfunction and listed for cystoscopy and intrasphincteric urethral botox injection were consented for an intra-operative UPP. All had had pre-operative UPP (awake). All underwent sedation with remifentanyl, propofol and midazolam. The UPP was performed according to standard protocol. MUCP were measured in 3 repeats at 0, 100, 200, 300, 400 and 500mL bladder filling.

Results:

Table 1 lists the pre-operative (awake) and the intra-operative (asleep) mean MUCP values for each of the 4 patients.

Conclusion:

Asleep MUCP tended to be lower than awake MUCP. Although no firm conclusions can be made due to the very small cohort, we postulate that sedation results in pelvic floor relaxation and asleep MUCP is unlikely to reflect real-life urethral sphincter function. Additionally, MUCP did not appear to be significantly affected by bladder filling. This is helpful as current UPP protocols do not advocate a specific bladder volume before UPP measurement. A larger series is required to validate our results.

Reference

[1] Edwards L and Malvern J. BJU. 1974;46:325-336. [2] Kapoor D and Drake M. Studies assessing urethral pressures. Abrams Urodynamics. 4th Edition 2021. 199-216.