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OVERACTIVE PELVIC FLOOR AND URETHRAL PAIN SYNDROME

Hypothesis / aims of study

Many female patients all over the world are suffering from urethral pain. Usually they undergo many courses of antibiotics, because their attending physicians diagnose this condition as urethritis. In most cases this treatment can't help patient. C.Fowler has formed hypotheses that urethral pain and bladder outlet obstruction could be related with increased tone of striated sphincter and suggested that injections of botulinic toxin (BTX) could relax the sphincter and release urethral pain and obstruction. However, in some cases pain is not release after BTX injections. We supposed that urethral pain syndrome could be explained by increased resting tone of pelvic floor muscles as well as increased tone of striated sphincter. Relaxation of pelvic floor muscles with BTX injections could decrease the urethral pain and obstruction.

Study design, materials and methods

15 female patients participated in the study. Mean age was 29.8 years (21 - 39). All of them suffered from pain at the urethral area, in most cases pain aggravated after urination. Results of all cultural and PCR studies were negative.

We performed urodynamic study, focused on urethral profile. Also we evaluated tone of levator ani muscles with vaginal manometry. Pelvic floor muscles (m.levator ani, m.obt.int.) were evaluated with palpation and their tone was estimated with Lamont scale (0-5 points).

Urofloumetry was also included in the assessment as well as measurement of postvoiding residual urine (PVR). All participants filled Urethral Pain Syndrome Questionnaire (UPS-Q) – non-validated.

Urethral Closure Pressure was 107,7 cm H₂O (88-135)

Vaginal Pressure was 93,26 (75-104 cm Hg)

Average muscle tone (Lamont scale): m.levator ani left 2,13; right 2,06; m.obt.int. left 0,73; right 0,93; urethra 1,06; bladder trigonum area 2,13

Urofloumetry: Qmax 13,46 ml/sec (12-24)

PVR: 16,46 ml (0-45)

UPS-Q 19,6 (15-24)

All participants undergo BTX injections into the pelvic floor muscles with Stimuplex needle and electric stimulation 2 Hz frequency. BTX dose was depended on tone with Lamont scale (50 – 150 U). Injections into bladder trigonum performed with flexible needle through cystoscope.

Results were estimated 3 months later.

Results

Urethral Closure Pressure became 74,8 cm H₂O (62-88)

Vaginal Pressure was 64,06 (55-75 cm Hg)

Average muscle tone (Lamont scale): m.levator ani left 0,46; right 0,46; m.obt.int. left 0,13; right 0,26; urethra 0; bladder trigonum area 0,73

Urofloumetry: Qmax 22,33 ml/sec (12-24)

PVR: 4,8 ml (0-45)

UPS-Q 11,73 (9-15)

Interpretation of results

Urethral pain reduced after BTX injections into pelvic floor muscles as well as urine stream increased.

Concluding message

Disclosures

Funding: Nothing to disclosure **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Moscow State Hospital ?29 local ethic committee **Helsinki:** Yes **Informed Consent:** Yes