**575** Adile B<sup>1</sup> 1. Villa Sofia CTO

# ALPHALITICS IMPROVE URODYNAMIC PARAMETERS AND CLINICAL SYMPTOMS IN WOMEN AFFECTED BY FUNCTIONAL OBSTRUCTION.

### Hypothesis / aims of study

Bladder outlet obstruction in the female is an underdiagnosed process frequently, which presents with a clinical picture different than in males. (1)

Its prevalence has been estimated to be between 2.7% and 29%. (2)

Conceptually, voiding phase dysfunction may have bladder or urethral causes. Bladder causes include detrusor contraction of inadequate magnitude or duration to effect bladder emptying (detrusor underactivity), or the absence of detrusor contraction (detrusor arreflexia). Urethral causes consist of bladder outlet obstruction as a result of urethral overactivity (functional obstruction), or anatomical (mechanical obstruction) pathologies. The specific prevalence and contribution of each of the above mechanisms is unknown. (3)

It is known that alphalitics are effective in the treatment of benign prostatic hypertrophy.

Several immunohystochemical study have confirmed alpha adrenoceptors presence also in female urethral and detrusor smooth muscle; starting from that evidence many physicians have adopted tamsulosin, an alpha-1A adrenoceptor antagonist to cure functional obstruction. Aim of our study was to assess to effects of Tamsulosin 0,4 mg daily for 12 months on the female minctional functional obstruction.

### Study design, materials and methods

After urodynamics assessment, urography and urethocystoscopy we have diagnosed 38 outlet obstruction exclusively due to a smooth muscle spasm or hypertone, distinguishing this form from that "pseudodyssinergia" due to striated sphincter alteration.

Inclusion criteria for our study were age >20< 78, Q-max < 15 ml/sec, urinary obstruction symptoms since almost 1 year.

Every patient underwent to a complete anamnesis, physical examination, urogynecology objective exam and completed a minctional diary.

#### **Results**

Improvement of Q-max from a mean of 8.6 ml/sec to a 14, 2 ml/sec was observed after one year of therapy during which they were controlled monthly thanks to a three day minctional diary.

Interpretation of results

Important improvements in urgency symptoms have been noted expecially in patient affected by a severe outlet obstruction (Q-max < 10 ml/sec), demonstrate the positive effects of tamsulosin on the alpha detrusor adrenoceptor as also a "detrusor inhibitor". Concluding message

Larger sample of "primary-pure" obstruction need to assess the efficacy of tamsulosin in the treatment of functional obstruction and deriving symptoms but the presence of alpha1 adrenoceptor in human detrusor may surely suggests an impact on drug development.

## References

- 1. Obstruction of the lower urinary tract in women Arch Esp Urol. 2002 Nov;55(9):989-99. Review
- 2. Bladder outlet obstruction in women: prevalence, recognition, and management. Curr Urol Rep. 2001 Oct;2(5):379-87.
- 3. Non-neurogenic female voiding dysfunction. Curr Opin Urol. 2002 Jul;12(4):311-6.