Coexistence of overactive-underactive bladder was described for the first time in 2019 as a unique real clinical syndrome by International Consultation on Incontinence research society. Coexistent overactive-underactive bladder (COUB) is different from single overactive bladder (OAB) and underactive bladder (UAB). Literature lacks in details about characteristics of population affected.

**Methods and Materials**

Many Italian centers were involved from January to December 2020 in a multicenter retrospective study. Inclusion criteria; clinical evidence of coexistence of OAB symptoms (urgency/frequency/urgency urinary incontinence) + UAB symptoms/signs (sensation of incomplete bladder emptying and/or postvoid residual [PVR] >100 ml and/or Qmax ≤12 ml/s on uroflowmetry in both men and women).

Age and sex of patients, aetiology, BMI, personal history, time of diagnosis, parity in women, urinary tract infection rate, sexual activity, previous gynecological surgery, presence and stage of pelvic organ prolapse, stress/urgency urinary incontinence, urodynamic test, medical therapy, intermittent catheterization, advanced treatments data were collected.

Were enrolled a total of 201 patients that were divided into 2 groups 34 whit neurogenic aetiology and 167 non-neurogenic.

**Introduction**

Neurogenic group showed lower mean age at diagnosis than other group (p 0.0094), higher rate of urgency urinary incontinence (p 0.008) and constipation (p 0.006), lower Qmax (p 0.001), higher PVR (p 0.002). The non-neurogenic group (mostly women, p 0.001) presented a higher mean BMI (p 0.006).

**Results**

- **Medical therapy** (alpha-blockers, antimuscarinics, mirabegron and combinations) had good efficacy rate in 68% of patients (no statistically significant difference between the 2 groups).
- Mirabegron achieved the best results either alone and in combination and is recommended as the first line for treatment.
- Intradetrusoral injection of botulinum toxin performed excellently on OAB, but also in mixed cases; sacral neuromodulation had better results in non-neurogenic group.

The neurogenic group revealed higher rate of self-catheterism (p 0.002). Urodynamic test was performed in 143 patients with diagnosis of detrusor overactivity (DO) (50.3%), detrusor underactivity (DU) (38.5%), coexistence of DO+DU (15.4%), obstruction (46.1%).

**Predictive factors** by multivariate analysis were lower Qmax, higher PVR and lower rate of POP in women (p 0.0002; p 0.05; p 0.04 respectively).

COUB is not the simple combination of both syndromes, and a specific treatment of the pre-dominant symptoms is recommended. COUB has not (by far) any predictive characteristics and always should be treated, often in combination therapy.

**Conclusions**

Urodynamic test really confirmed the coexistence of DO + DU in 15.4% of cases only, and it is recommended in doubtful situations or in patients with no response to first line treatment.

**REFERENCE**

Is coexistent overactive-underactive bladder (with or without detrusor overactivity and underactivity) a real clinical syndrome?