

**DEFINITION:** **URINARY URGENCY**, with or without urgency incontinence (OAB wet; OAB dry), usually with increased day time frequency and nocturia, if there is no proven infection or other obvious pathology.  
**DETRUSOR OVERACTIVE (DO):** Is the hallmark urodynamic feature

Is a **chronic, dynamic disease**, with long-lasting stable disease courses, remissions and progressions.

**PREVALENCE:** 12-17% of the adult population. **Increases with age and is slightly more frequent in women.**

There are two possible origins } }

- Decreased capacity to handle the afferent signs in the brain
- Abnormally increased afferent signals from the bladder/urethra

## DIAGNOSIS

**Clinical history and physical examination**

**Questionnaires** (ICIQ-SF, OABQ-SF...) **and bladder diaries** (at least 3 days diary)

**Urinalysis** (if a UTI is present with LUTS, reassess the patient after treatment)

**Urodynamics:** is essential in establishing DO, but the diagnosis of OAB is based on symptoms alone

## DISEASE MANAGEMENT

### FIRST STEP: CONSERVATIVE MANAGEMENT

- Addressing underlying disease/cognitive impairment/review and adjust medication
- Reduce fluid intake, caffeine, smoking cessation, weight loss
- Bladder training and pelvic floor muscle training

### SECOND STEP: PHARMACOLOGICAL MANAGEMENT

#### MUSCARINIC RECEPTOR ANTAGONISTS

M2 and M3 subtypes are predominant in the detrusor.

**Reduce urgency, urgency incontinence and frequency.**

- **Propiverine 30/45mg (orally ER)**  
(dual mode of action: **anticholinergic** and calcium antagonistic)
- Oxybutynin 5mg (orally IR and ER), 3,9mg (patch)  
(dual mode of action: anticholinergic and antispasmodic)
- Fesoterodine 4mg/8mg (orally ER)
- Solifenacin 5mg/10mg (orally IR)
- Tolterodine 4mg/8mg (orally ER)
- Trospium chloride 20mg (orally IR)

**Adverse events:** dry mouth, constipation, nasopharyngitis, blurred vision, prurito and dizziness. ER have less adverse events.

**NO in men with post-void residual volume >150mL, gastric retention and narrow-angle glaucoma**

#### BETA-3 AGONISTS

**Reduce urgency, UII and frequency, improve voided volume and nocturia.**

- Mirabegron 50mg (orally ER)

**Adverse events:** hypertension, UTI, headache and nasopharyngitis.

Contraindicated in severe uncontrolled hypertension (systolic > 180mmHg, diastolic >110mmHg).

**BLOOD PRESSURE SHOULD BE MONITORED**

**If an anticholinergic proves ineffective, consider dose escalation, alternative formulation, mirabegron or a combination**

### THIRD STEP

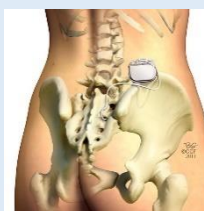
**Posterior tibial nerve stimulation**



**Bladder wall injection of botulinum toxin A (100U)**



**Sacral nerve stimulation**



### FOURTH STEP

**Augmentation cystoplasty/urinary diversion**

**With the support of**



**Created by Urology Cheat Sheet (@CheatUrology)**  
 Dr Ester Fernández Guzmán, Dr Esther García Rojo

- Harding CK et al. EAU Guidelines on Management of Non-neurogenic Female LUTS. 2022: 1-148  
 - Kreydin E et al. Current Pharmacotherapy of overactive bladder. Int Braz J Urol 2021; 47:1091-107