OBJECTIVES

Over the past decade, there has been an increase in therapies available to patients with idiopathic overactive bladder (OAB) in the United States:
• Mirabegron gained FDA approval in 2012 as an oral therapy
• Bladder chemodenervation received FDA approval in 2013

The goal of our study was to determine the trends in the use of OAB medical therapies on a national level.

RESULTS

• 3,519,529 patients with a diagnosis of non-neurogenic OAB were collected
• Of these, 18% underwent medical treatment
  • 17% used oral therapy only
  • 0.7% used advanced therapies
• Trends in therapies over time (graph):
  • Mirabegron use increased to 16% in 2016 while anticholinergic therapy use decreased from 97% in 2003 to 78% in 2016
  • Bladder chemodenervation increased from 2% use in 2003 to 4% in 2016
  • Sacral neuromodulation remained low at 0.4%
  • PTNS use remained low at 0.01% in 2016

METHODS

• A retrospective review was performed using Optum®, a national administrative health and pharmacy claims database with medical and prescription drug coverage by the largest commercial insurance company in the United States between 2003-2016
• Patients with non-neurogenic OAB were identified by ICD9 and ICD10 diagnosis codes
• Medical Interventions were grouped by:
  • Oral medication (Anticholinergic therapy, Mirabegron)
  • Bladder chemodenervation
  • Sacral neuromodulation (SNS)
  • Peripheral tibial nerve stimulation (PTNS)

Optum ® 2003-2016

Patients with Diagnosis of OAB (ICD9 and ICD10 diagnosis codes)

Excluded:
- Age < 18 years
- Neurogenic bladder

No Medical Treatment
Medical Treatment

Oral Therapy Only*
Advanced Therapies**
Bladder Chemodenervation
Sacral Neuromodulation
PTNS

*generic drug names
**Procedural codes:
- CPT for outpatient procedures
- ICD9, ICD10 procedure codes for inpatient procedures

CONCLUSIONS

A rise in Mirabegron use in 2012 coincides with a decline in anticholinergic use for management of OAB, suggesting that providers are increasingly utilizing Mirabegron. Chemodenervation increased over time since 2010 while PTNS and SNS use remained low. Further research is needed to determine whether newer oral therapies are more efficacious or whether third line therapies are not being fully utilized.