

Foreword



Overactive bladder (OAB) is a term coined by the pharmaceutical industry that later was described by the International Continence Society as a "symptom syndrome suggestive of lower urinary tract dysfunction." Since 2001, OAB has been defined as "urgency, with or without urge incontinence, usually with frequency and nocturia." Now meant to encompass the oft elusive, urodynamically defined detrusor instability and, at least in part, the now defunct sensory urgency, OAB affects an estimated 17% of adults in Europe and in the United States, where in 1995, costs for treatment of sufferers over age 65 topped \$25 billion. US Census data projections predict a steep increase in both rates and costs over the next 30 years, as "baby boom" generations mature.

The most recent analytic permutations of the National Overactive Bladder Evaluation (NOBLE) data reveal gender-specific differences in clinical ramifications of OAB, with women far more likely to be suffering concomitant urge incontinence, or "OAB wet," than men, who are far more likely to suffer "OAB dry," a dichotomy presumed due to obvious differences in urogenital anatomy. Conversely, NOBLE data document overall prevalence rates that do not differ between the sexes, stating further that "...overactive bladder, with and without incontinence, has a clinically significant impact on quality-of-life, quality-of-sleep, and mental health, in both men and women."

Pharmacotherapy continues to play a key role in the treatment of OAB, with cholinergic postsynaptic receptor blockade the classic therapeutic mode. This monograph contains a timely review of current pharmacotherapy for OAB, with a focus on the growing number of anticholinergic agents, both available and currently in Phase III FDA clinical trials. Differences in lipophilicity, delivery system, metabolism, and muscarinic receptor affinity are reviewed with a focus on efficacy, tolerability, and impact on clinical practice. Our understanding of the pharmacophysiology of OAB therapy continues to evolve, with growing concerns about central nervous system muscarinic receptor activation and blockade as it impacts on cognitive function, the role of M_3 and M_2 post- and presynaptic receptors in the normal versus the pathologic overactive bladder, and the rudiments of muscarinic receptor activity in the urothelium. Other areas of clinical interest include the role of purinergic receptors, potassium channel openers, calcium channel blockers, botulinum toxin presynaptic blockade of acetylcholine release, and the effect of vanilloids (capsaicin and resiniferatoxin) on unmyelinated C-fiber sacral micturition reflex arc activity in those suffering symptoms of OAB.

Beginning with an update on the neurogenic/myogenic etiologic debate, this supplement includes current epidemiologic and quality-of-life impact data, consideration of the evolving definitions of lower urinary tract disorders involved in the overactive bladder label, the utility of urodynamic testing, and a comprehensive review of available and upcoming pharmacologic therapies that will make this a desk top reference of great utility for clinicians involved in the care and counseling of patients with lower urinary tract symptoms.

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