

EFFICACY OF SOLIFENACIN IN PATIENTS WITH SEVERE SYMPTOMS OF OVERACTIVE BLADDER: A POOLED ANALYSIS

Hypothesis / aims of study

Solifenacin is a once-daily antimuscarinic drug recently approved in the United States and Europe for the treatment of overactive bladder (OAB) syndrome. Results from randomized controlled trials of solifenacin showed significant improvements in OAB symptoms including incontinence, urgency, and frequency with a low rate of treatment-limiting adverse events.[1,2,3] More than half of patients who reported experiencing incontinence at baseline were restored to continence following 12 weeks of treatment with solifenacin. The efficacy of drug therapy in patients with more severe symptoms of OAB has not been evaluated thoroughly. It is of interest to see if new and emerging treatment options for OAB can provide clinical benefits across the spectrum of disease severity. Therefore, a subgroup analysis was performed on data pooled from four 12-week, phase III randomized, placebo-controlled studies to determine the effects of solifenacin in patients with severe OAB symptoms at baseline.

Study design, materials and methods

Results from multinational phase III studies of solifenacin conducted with similar protocols were pooled. Eligible patients included men and women, at least 18 years of age, with an average of ≥ 8 micturitions, and either ≥ 1 incontinence episode/24 hours or ≥ 1 urgency episode/24 hours. Patients were randomized to treatment with placebo or solifenacin 5 mg (2 of 4 studies) or 10 mg once daily. For this analysis, baseline severity was defined as >3 incontinence episodes/24 hours, >8 urgency episodes/24 hours or > 13 micturitions/24 hours. Mean change from baseline to endpoint for the number of episodes/24 hours of incontinence, urgency, and micturitions, and for volume voided/micturition were assessed. The proportion of patients with restoration of continence, resolution of urgency or normalization of micturition frequency (<8 /day) at endpoint was evaluated.

Results

Solifenacin 5 and 10 mg were significantly ($P<0.05$) more effective than placebo for mean reductions in the number of episodes of incontinence, urgency, and micturitions, and for an increase in volume voided/micturition among subgroups of patients with severe symptoms at baseline. The proportion of patients with restoration of continence, resolution of urgency, and normalization of micturition frequency (<8 /day) at endpoint was greater with solifenacin than with placebo (Figure 1). The incidence of adverse events was similar in solifenacin and placebo groups. Common adverse events were dry mouth, constipation, and blurred vision.

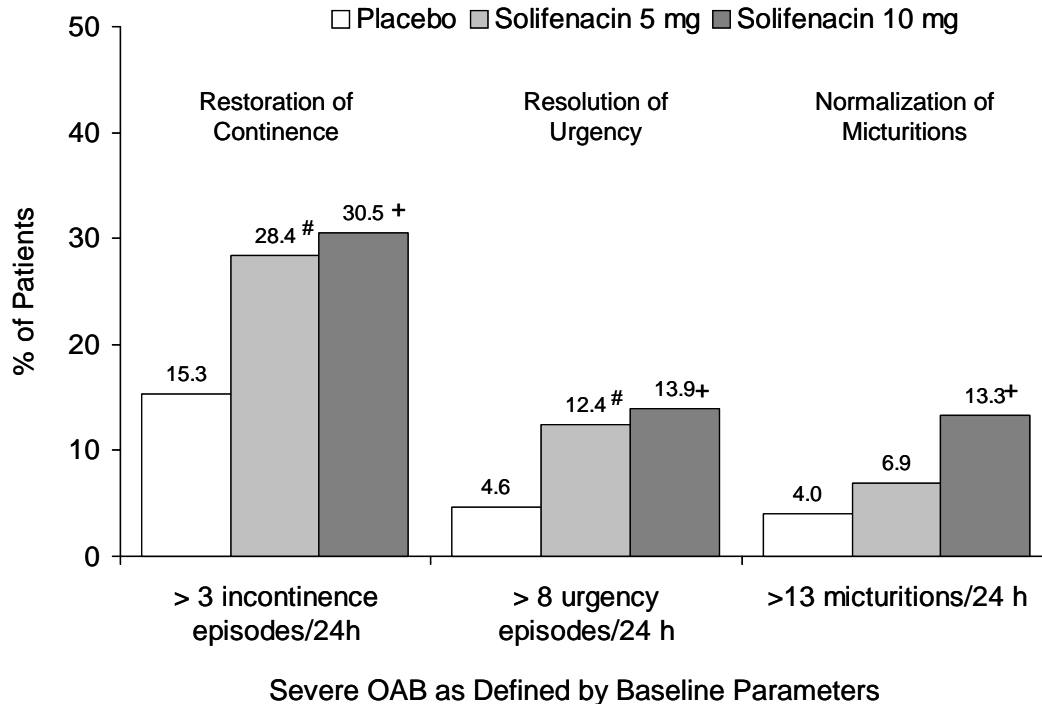


Figure 1. Percent of patients with restoration of continence, resolution of urgency, and normalization of micturition frequency at endpoint among the subgroup of patients defined as severe at baseline. # $P < 0.01$, + $P < 0.001$ vs. placebo.

Interpretation of results

The results of this pooled analysis show that in patients with severe OAB defined by an increased frequency of symptoms of incontinence, urgency or micturitions at baseline, once-daily doses of solifenacin 5 and 10 mg were more effective than placebo at improving clinical endpoints. Among patients defined as severe at baseline, the proportion who achieved restoration of continence, resolution of urgency or normalization of micturition frequency was significantly greater with solifenacin compared with placebo.

Concluding message

Solifenacin was significantly more effective than placebo at improving incontinence, urgency, and micturition frequency for patients with severe OAB symptoms at baseline. The significant and consistent response with solifenacin observed using different definitions of baseline disease severity supports the overall effectiveness of solifenacin in highly symptomatic patients.

References

1. Randomized, double-blind placebo controlled trial of the once daily antimuscarinic agent solifenacin succinate in patients with overactive bladder. J Urol. 2004;172:1919-1924.
2. Solifenacin appears effective and well tolerated in patients with symptomatic idiopathic detrusor overactivity in a placebo- and tolterodine-controlled phase 2 dose-finding study. BJU Int. 2004;93:71-77.
3. Randomized, double-blind placebo- and tolterodine-controlled trial of the once-daily antimuscarinic agent solifenacin in patients with symptomatic overactive bladder. BJU Int. 2004;93:303-310.

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