

SOLIFENACIN PROVIDED STATISTICALLY SIGNIFICANT AND CLINICALLY RELEVANT REDUCTIONS IN URGENCY, A DEFINING SYMPTOM OF OVERACTIVE BLADDER

Hypothesis / aims of study

Urgency is a defining symptom of overactive bladder (OAB) and is typically accompanied by urge incontinence and urinary frequency. In a recent review of antimuscarinic therapy for OAB [1], it was suggested that urgency might be more relevant than frequency or incontinence as an efficacy outcome for symptomatic patients. Further, urgency has rarely been included as a quantified efficacy variable in clinical trials of OAB. In two pivotal studies of solifenacin succinate, a once-daily (od) oral antimuscarinic agent evaluated for the treatment of OAB, [2, 3] efficacy (reductions in key symptoms of OAB, including urgency, incontinence, and frequency), safety, and tolerability were reviewed. In this abstract, we report reductions in the number of urgency episodes per 24 hours taken from a pooled analysis of these two studies.

Study design, materials and methods

The two phase 3 studies were randomised, placebo-controlled, and double-blind; they had similar protocols and designs and were carried out internationally. In one study, tolterodine 2 mg twice daily was included as an active treatment arm, but the results are not reported here. Efficacy outcomes were based on 3-day micturition diaries in which each urgency episode was recorded as an independent event. Study duration was 12 weeks and diaries were collected at baseline, 4, 8, and 12 weeks. For the efficacy analysis, 1640 patients were available; 1624 patients who reported urgency episodes at study baseline were included in the analysis reported here: 526 treated with placebo, 548 treated with solifenacin 5 mg od, and 550 treated with solifenacin 10 mg od.

Results

For this patient cohort, mean urgency episodes per 24 hours at baseline ranged between 5.5 and 5.9. Actual changes from baseline to end point in mean number of urgency episodes per 24 hours were -2.9 for solifenacin 5 mg od and -3.0 for solifenacin 10 mg od vs -1.7 for placebo. Adjusted mean treatment differences from placebo, calculated to account for baseline variations, were -0.99 (95% CI; -1.37, -0.60) and -1.21 (95% CI; -1.59, -0.83) urgency episodes per 24 hours for solifenacin 5 mg od and 10 mg od, respectively. Both differences were statistically significant at $P < .001$ (Bonferroni-Holm). Reductions of 50% or more in the number of daily urgency episodes at study end were reported by 62% (5 mg od) and 66% (10 mg od) of patients treated with solifenacin compared with patients receiving placebo (50%; $P < .001$ for both doses). A total of 29% (solifenacin 5 mg od), 32% (solifenacin 10 mg od), and 23% (placebo) of patients reported no urgency episodes at study end. The proportion of patients reporting no urgency at end point was statistically significant relative to placebo with the 10 mg dose ($P < .01$). In patients with urgency who experienced incontinence at baseline, statistically significant decreases were also observed. Adjusted mean differences from placebo in urgency episodes in incontinent patients were -1.02 (95% CI; -1.54, -0.50) for solifenacin 5 mg od and -1.31 (95% CI; -1.83, -0.79) for solifenacin 10 mg od ($P < .001$ for both doses).

Interpretation of results

Solifenacin at both the 5 mg and 10 mg once-daily doses statistically significantly reduced the number of urgency episodes and is an effective treatment of OAB.

Concluding message

When reductions in urgency episodes were quantified using data collected from micturition diaries, treatment with solifenacin was associated with statistically significant and clinically relevant reductions in urgency in the full study population and in patients with incontinence. Based on this pooled analysis, solifenacin demonstrated effective relief of urgency, a defining symptom of OAB.

References

1. Antimuscarinics for treatment of overactive bladder. *Lancet Neurol.* 2004;3:46-53.
2. 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.
3. Randomized, double-blind placebo-controlled trial of the once-daily antimuscarinic agent solifenacin succinate in patients with overactive bladder. *J Urol.* 2004;172 (In press).