

SOLIFENACIN STATISTICALLY SIGNIFICANTLY INCREASED CONTINENCE RATES IN SUBJECTS WITH SYMPTOMS OF THE OVERACTIVE BLADDER SYNDROME

Hypothesis / aims of study

Symptoms of the overactive bladder (OAB) syndrome include urgency, with or without urge incontinence, usually with frequency and nocturia. More than one third of people with OAB experience incontinence, which has a severe impact on their quality of life [1]. Solifenacin succinate is a once-daily (od) oral antimuscarinic agent evaluated for the treatment of OAB (dosed at 5 mg, the suggested starting dose, or at 10 mg). In clinical trials conducted worldwide, solifenacin treatment has demonstrated statistically significant reductions in urgency, frequency, and incontinence, the key symptoms of OAB [2, 3]. Incontinence outcomes were gathered from a pooled analysis of two pivotal studies of solifenacin and an open-label, 40-week extension of these studies designed to assess long-term efficacy and tolerability.

Study design, materials and methods

Data from subjects who reported incontinence episodes at baseline were combined from two 12-week, randomised, placebo-controlled, double-blind studies with comparable baseline demographics and study protocols that permitted pooling. Subjects in the extension study could maintain or adjust their solifenacin dose (between 5 mg and 10 mg) following assessment visits at weeks 16, 28, and 40. Data were collected from 3-day micturition diaries completed at multiple time points during the double-blind and open-label studies.

Results

From the two 12-week studies, a subset of 943 subjects (from a total population of 1640), who reported a mean number of 2.6 to 3.0 incontinence episodes per 24 hours at baseline, were evaluated. Statistically significant reductions in incontinence episodes relative to baseline were seen with solifenacin 5 mg od (–1.5) and solifenacin 10 mg od (–1.5), versus placebo (–1.0). Adjusted mean treatment differences from placebo were –0.66 (95% CI; –0.96, –0.35) and –0.60 (95% CI; –0.91, –0.30) for solifenacin 5 mg and 10 mg, respectively ($P < .001$ for both doses compared with placebo). In addition, 51% of subjects receiving solifenacin 5 mg od or solifenacin 10 mg od became continent ($P < .01$) in comparison to 38% of subjects receiving placebo after 12 weeks of treatment. A large majority (91%) of subjects who completed the 12-week studies elected to enroll in the extension study. Further reductions (–0.13) in incontinence episodes per 24 hours were observed during the extension study. After an additional 40 weeks of solifenacin treatment, the continence rate in the open-label extension study increased to 60%. The majority of adverse events (AEs) reported were mild to moderate in severity. Overall, at the end of the extension study, rates of dry mouth were 10% in subjects while receiving solifenacin 5 mg od and 17% in subjects while receiving solifenacin 10 mg od; the rate of dry mouth in the total population was 21%.

Interpretation of results

After 12 weeks of treatment, solifenacin 5 mg od and 10 mg od statistically significantly reduced episodes of incontinence compared with placebo in subjects with OAB. One half of the subjects treated with solifenacin achieved continence. Further reductions in incontinence episodes, as well as additional increases in the continence rate, were observed after long-term solifenacin treatment. The safety profile of patients treated with solifenacin for up to 1 year was consistent with that seen in short-term studies, suggesting that the flexible dosing offered in the extension study may be associated with improvements in therapeutic response and a favourable tolerability profile.

Concluding message

In contrast to prior experience with antimuscarinic therapy, the continence rate increased with duration of solifenacin treatment.

References

1. How widespread are the symptoms of an overactive bladder and how are they managed? A population-based prevalence study. *BJU Int.* 2001;87:760-766.
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).