578

Han J¹, Lee K², Park W H³, Park C H⁴, Lee J G⁵, Lee J Z⁶, Kim D Y⁷, Na Y G⁸, Kwon D D⁹, Kim K S¹⁰, Park S¹¹, Choo M¹⁰

1. Pusan National University Yangsan Hospital, 2. Samsung Medical Center, Sungkyunkwan University School of Medicine, 3. Inha University College of Medicine, 4. Keimyung University School of Medicine, 5. Korea University Hospital, 6. Pusan National University Hospital, 7. Catholic University of Daegu School of Medicine, 8. Chungnam National University School of Medicine, 9. Chonnam National University Medical School, 10. University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University of Ulsan College of Medicine, 11. Ulsan University Hospital, University Hospital, Ulsan Ulsan University Hospital, Ulsan Ulsa

A COMPARATIVE STUDY ON THE EFFICACY OF SOLIFENACIN SUCCINATE IN PATIENTS WITH URINARY FREQUENCY WITH OR WITHOUT URGENCY

Hypothesis / aims of study

Patients with overactive bladder (OAB) often have trouble perceiving urinary urgency because of difficulties in distinguishing between urgency and desire to void¹⁻³. Empirical antimuscarinic treatment of patients with frequency only may be reasonable if conservative management has failed.

We compared the efficacy of solifenacin in patients with frequency with or without urgency.

Study design, materials and methods

This multicenter, 12-week, open-label, comparative, non-inferiority study was based on the hypothesis, "The efficacy of solifenacin for frequency only is non-inferior to the efficacy of solifenacin for frequency with urgency". The study population consisted of men and women (\geq 18 years old) who had the symptom of frequency without (Group 1) or with (Group 2) urgency for more than 3 months. Frequency was determined on the basis of 3-day bladder diaries and defined as an average micturition frequency \geq 8/24 hours and urgency was defined as a score \geq 3 on the urinary sensation scale. All patients received solifenacin 5mg once daily. At the week 4 visit, the dose could be increased to 10mg based on discussion between the subject and investigator regarding treatment efficacy and tolerability. Primary efficacy variable: daily frequency change at 12 weeks relative to baseline. Secondary efficacy variables: change at 12 weeks relative to baseline in PPBC (Patients' Perception of Bladder Condition), OABSS (OAB Symptom Score), and BSW (Benefit, Satisfaction, Willingness to continue) questionnaire scores. Safety was evaluated by adverse events and measuring maximal urinary flow rate and post-void residual urine.

Results

Of the 286 enrolled patients, 240 (83.9%) completed the study (without urgency n=115; with urgency n=125) (Figure 1). Full dataset analysis revealed that the groups without and with urgency exhibited significant reductions in daily micturition frequency (-2.49 ± 3.71 and -2.63 ± 4.19 , respectively, p=0.176) (Table 1). The lower limit of the 95% two-sided CI of the comparison of the two group means was -1.14, which is smaller than the -0.8 margin of clinical equivalence. The two groups did not differ in mean voided volume or improvement in PPBC, OABSS, or BSW scores. Both tolerated the treatment well.

Interpretation of results

It was not possible to verify that the solifenacin efficacy for frequency alone was non-inferior to its efficacy for OAB. Nevertheless, solifenacin was effective for frequency regardless of urgency.

Concluding message

The 12-week solifenacin treatment was effective in all patients with frequency, regardless of whether they also had urgency.



Table 1. Non-inferior analysis of solifenacin with the daily mean voiding frequency in patients with urinary frequency and urgency or frequency only [FAS group]

Variables	Frequency without urgency group	Frequency with urgency group	<i>p</i> - value
	(Group 1)	(Group 2)	
Baseline	12.32 ± 3.27	13.16 ± 4.26	0.0860*
Week 12	9.82 ± 3.88	10.52 ± 4.64	0.2087*
Change from baseline	-2.49 ± 3.71	-2.63 ± 4.19	0.7823*
95% ČI	-3.17, -1.81	-3.37, -1.90	
95% CI for difference	-1.14, 0.86†		

References

- 1. Abrams P, Chapple C, Jünemann K-P, Sharpe S. Urinary urgency: a review of its assessment as the key symptom of the overactive bladder syndrome. World JUrol 2012;30:385-92.
- 2. Digesu GA, Khullar V, Panayi D, Calandrini M, Gannon M, Nicolini U. Should we explain lower urinary tract symptoms to patients? Neurourology and Urodynamics. 2008;27:368-71.
- 3. Coyne KS, Harding G, Jumadilova Z, Weiss JP. Defining urinary urgency: Patient descriptions of "gotta go". Neurourology and Urodynamics. 2012;31:455-9.

Disclosures

Funding: Astellas, Korea Clinical Trial: Yes Registration Number: ClinicalTrials.gov: NCT00979472 RCT: No Subjects: HUMAN Ethics Committee: Asan Medical Center Institutional Review Board Helsinki: Yes Informed Consent: Yes