Effect of Solifenacin on Cognition in Geriatric Patients: Results of the Non-Interventional Study "Vesicare in Geriatric Application: VEGA"

Introduction and Objective: Solifenacin (Vesicare[®]) improves all symptoms of overactive bladder (OAB) in randomised controlled trials (RCT). Anticholinergic drugs have been suggested to potentially affect cognition. Due to the specific setting of RCTs those studies do not necessarily reflect application in a general care setting. This bias is even more evident in geriatric patients, who are often excluded from RCTs. The non-interventional study VEGA assesses safety of solifenacin in a geriatric population focussing on cognitive effects.

Materials and Methods: Data were collected at 294 German offices of general practitioners from 11/2010 to 09/2011. OAB-patients aged 70 years or more receiving a flexible dose of solifenacin were assessed over a 12-week treatment duration. Changes in symptom severity were evaluated; potential impact on cognition was surveyed by Mini Mental State Examination (MMSE) at initial and final visits. Results: A total of 917 patients were assessed; mean age was 77 ± 7 years. Concomitant disease was reported in 89%; the three most common conditions were hypertension in 82%, coronary artery disease in 28% and heart failure in 25%. Concomitant medication was reported in 86%; the three most common agents were ramipril in 33%, acetylsalicylic acid in 21% and metoprolol in 17%. 88% had previously received anticholinergic treatment which was either discontinued due to lack of efficacy or untolerability. There were 95% of patients started on solifenacin 5mg and 5% on solifenacin 10mg; 23% of patients increased dose to 10mg by the study's end. Cognition status in MMSE before and after treatment (mean 13.6 weeks) was reported in 555 patients and showed no (27-30 points), mild (18-26 points, intermediate (10-17 points) and severe impairment (>=9 points) at study initiation in 51%, 38%, 10% and 1% of patients versus 58%, 32%, 10% and 1% at study termination, respectively. Mean MMSE values were 24.6 (SD ±5.3) at study initiation versus 25.3 (SD ±5.1) at study termination.

Conclusion: This large series demonstrates well-tolerated treatment of OAB- symptoms in geriatric patients with solifenacin 5/10 mg in a general care setting. Despite learning effects that have to be considered treatment appears to be without clinically relevant impact on cognitive status.