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COMPARISON OF TWO DIFFERENT DRUGS FOR OVERACTIVE BLADDER, SOLIFENACIN SUCCINATE AND MIRABEGRON : A PROSPECTIVE RANDOMIZED CROSSOVER STUDY

Hypothesis / aims of study
We assessed the efficacy and safety of two drugs for overactivebladder, solifenacin succinate and mirabegron.

Study design, materials and methods
Women of twenty years old or older who diagnosed as overactive bladder were enrolled in this study. Forty-seven patients (mean age 67.0 years, range 34-88) were randomized into 2 groups. Twenty-three patients were initially prescribed solifenacin succinate 5mg once daily for 4 weeks, followed by mirabegron. 50mg once daily for 4 weeks (group S); the other group of 24 patients were initially prescribed mirabegron for 4 weeks, followed by solifenacin succinate for 4 weeks (group M). When patients switched to the alternative treatment, clearance period was not provided. Evaluations included clinical determination of Overactive bladder symptom score (OABSS), King's Health Questionnaire (KHQ), International Prostate Symptom Score (IPSS), Visual Analog Scale(VAS), Uroflowmetry (UFM) and postvoid residual urine volume (PVR) before and after treatment 4 weeks and 8weeks.

Results
A total of 47 women, 23 in group S and 24 in group M, were treated and 38 (80.9 %) completed the treatment. OABSS was significantly improved in both groups after treatment. (group S : 8.3±1.9→4.5±3.9→3.8±3.5, group M : 8.8±2.9→5.9±3.5→4.0±2.8) There were no significant differences between the two groups. In the M group, OABSS after 8 weeks was significantly improved than after 4 weeks. On the other hand, in the group S, it was not significantly. KHQ, IPSS, QOL index, VAS were significantly improved in both groups after treatment. Qmax and PVR were not change before and after treatment in both group.
After taking both medications, 17 patients preferred solifenacin, 18 preferred mirabegron and others felt they hope other drugs. Twelve patients experienced adverse events during solifenacin treatment. Four patients complained of dry mouth, 3 patients complained of constipation and difficulty of urination. Two patients had eczema and itch, one of them stopped taking the medication. Two patients experienced adverse events during mirabegron treatment. One patient had itch, another one stopped taking the mirabegron who had stomach ache during treatment.

Interpretation of results
Both solifenacin succinate and mirabegron ware improved OAB symptoms. Switching mirabegron to solifenacin significantly improved OABSS. However, mirabegron showed less adverse events than solifenacin during the treatment period.

Concluding message
We recommend to prescribe mirabegron first for OAB patients. When patients are not satisfied with mirabegron, solifenacin would be used.

Disclosures
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