#561 Effectiveness of Mirabegron and Propiverine Combination in the Treatment of Overactive Bladder Resistant to Monotherapy

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Hypothesis / aims of study

Although there are studies in the literature on the effectiveness of the beta-3 agonist mirabegron and solifenacin combination, the effect of combination treatments with other anticholinergics has not been evaluated. The aim of this study is to evaluate the effectiveness and safety of mirabegron+propiverine combination in the treatment of OAB resistant to anticholinergic agent or beta-3 agonist treatment.

Study design, materials and methods

Patients who presented with OAB symptoms between March 2019 and August 2023 and did not respond to anticholinergic or beta-3 agonist treatment were included in the study. To evaluate the degree of symptoms, the overactive bladder symptom score (OABSS) and a 3-day bladder diary were filled out. All patients were recommended to use mirabegron 50 mg (Betmiga, Astellas Pharma, Japan) and propiverine 30 mg (Mictonorm SR, 30 mg, Recordati Pharmaceuticals, Italy) once a day. Patients' symptoms were evaluated with OABSS and bladder diary 12 months after treatment. Side effects and satisfaction rates were recorded.

Results and Interpretation

A total of 320 patients were included in the study. 66 of these patients were excluded from the study due to loss of follow-up and side effects. One year data of a total of 264 patients were examined. The average age of the patients was 56.33±15.93 (23-89). 200 of the patients were women (75.8%) and 64 were men (24.2%). The duration of symptoms was 50.74±49.03 (3-240) months. 205 of the patients (77.7%) had wet type OAB and 59 patients had dry type OAB (22.3%). After 1 year of treatment, the patients' OABSS score, mean daily micturition frequency according to the bladder diary, frequency of urge incontinence, nocturia and number of pads decreased compared to before treatment ($p<0.001$ for each, Table-1).

62.1% (164/264) of patients benefited from the mirabegron+propiverine combination. The most common side effects were dry mouth in 43 patients (16.3%), blurred vision in 16 patients (6.1%) and constipation in 59 patients (22.3%).

In patients in whom combination therapy failed, the initial OABSS score was higher (9.88±2.20 vs. 8.80±1.51; $p<0.001$), and urge incontinence attacks were observed (3.33±1.79 vs. 2). .30±1.46; $p=0.001$) and the number of nocturia (2.46±1.31 vs. 2.02±0.88; $p=0.003$) were found to be higher.

Interpretation of results

If there is no response to monotherapy in the treatment of OAB, combination therapy is recommended by the guidelines. Although mirabegron + solifenacin combination studies are frequently seen in the literature, no combination studies with propiverine have been observed. With the data obtained in our study, it is aimed to reduce the number of patients who will be directed to invasive treatments (Botox, PTNS, SNM, etc.) with this combination therapy in the treatment of resistant OAB.

	Before Treatment	After Treatment	p
OABSS	9,21±1,87	6,02±3,30	<0,001
Frequnecy	9,16±1,56	7,70±1,72	<0,001
Incontinence	2,69±1,67	1,63±1,70	<0,001
Nocturia	2,19±1,09	1,46±1,19	<0,001
Pad number	2,77±1,62	1,72±1,70	<0,001

Conclusions

Mirabegron+propiverine treatment is an effective and reliable treatment option in the treatment of OAB resistant to medical monotherapy. With this combination treatment to be used before botulinum toxin application in the treatment of resistant OAB, the number of patients who will receive Botox may decrease.