

ADD-ON THERAPY OF ORAL PENTOSAN POLYSULFATE FOR REFRACTORY OVERACTIVE BLADDER

Hypothesis / aims of study

To investigate the efficacy of pentosan polysulfate as an add on therapy for patients not responding to anticholinergic treatment.

Study design, materials and methods

Some patients with complaining of lower urinary tract symptoms of frequency and urgency are difficult to treat. The primary objective was to evaluate the efficacy of combination of pentosan polysulfate/solifenacin compared with solifenacin 5mg monotherapy in OAB patients. Patients with complaining of frequency and urgency were prospectively enrolled. Frequency volume charts were performed and patients with a maximum voided volume of over 350 ml were excluded. Patients were treated with either solifenacin 5 mg monotherapy (Control Treatment Group) or solifenacin 5 mg with pentosan polysulfate 300 mg (Add-On Treatment Group) for 3 months. Patients were followed with the Overactive Bladder Symptom Score (OABSS) and a three day voiding diary.

Results

A total of 80 patients were enrolled in this study. 40 patients in the Control Treatment Group, and 40 patients in the Add-On Treatment Group completed the study. Both groups showed no difference in change of average voided volume (increase of 54.42 ± 12.17 vs. 64.47 ± 10.05 ml for Control and Add-On, respectively, $p=0.98$), maximum voided volume (increase of 92.79 ± 24.65 vs. 99.60 ± 23.34 ml, $p=0.23$) or nocturia (decrease of 1.32 ± 0.21 vs. 1.51 ± 0.34 times, $p=0.84$). However, total frequency (decrease of 2.16 ± 0.34 vs. 2.95 ± 0.69 times, $p=0.04$) showed slightly greater decrease with the Add-On group. OABSS scores also showed a greater decrease with Add-On group (decrease of 1.12 ± 0.25 vs. 2.32 ± 0.22 , $p=0.03$). All combination were well tolerated, with no important additional safety findings compared with monotherapy.

Concluding message

Addition of Pentosan Polysulfate may be a feasible option for difficult-to-treat OAB patients not responding to previous treatment of anticholinergics.

Disclosures

Funding: none **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics not Req'd:** retrospectiv chart review **Helsinki:** Yes **Informed Consent:** No