Urinary levels of Monocyte Chemoattractant Protient-1predict the severity of Symptoms& Response To Treatment in Patient with Overactive Bladder

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Introduction

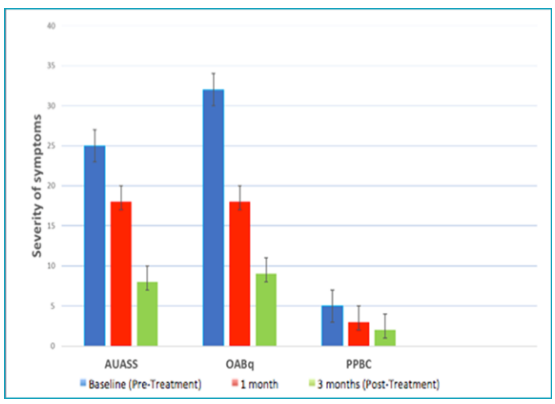
- We hypothesize that MCP-1 urinary levels correlate with OAB patients' symptom severity.
- Our aim is to correlate normalized MCP-1 urinary levels to OAB symptoms before and after treatment.
- We conducted prospective study on patients with OAB symptoms and age-matched controlled

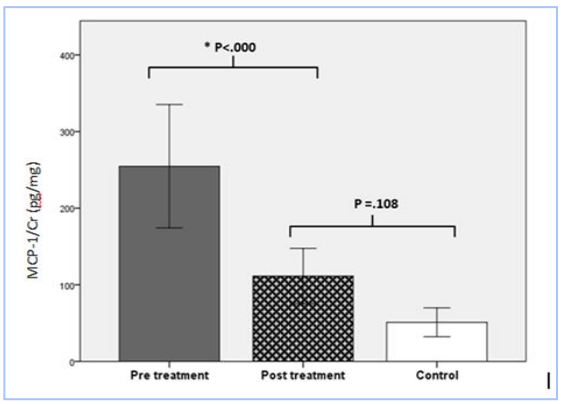
Methods

Urinary MCP-1 levels were measured in 36 patients with OAB and 13 controls.
Patients were treated after the first visit by different OAB treatments (anticholinergic, Beta-3 agonist, onabotulinum toxin A, neuromodulations).
Urinary MCP-1 levels were measured using enzyme-linked immunosorbent assay (ELISA), normalized by urinary creatinine levels, and expressed as picograms (pg) per milligram (mg) of creatinine

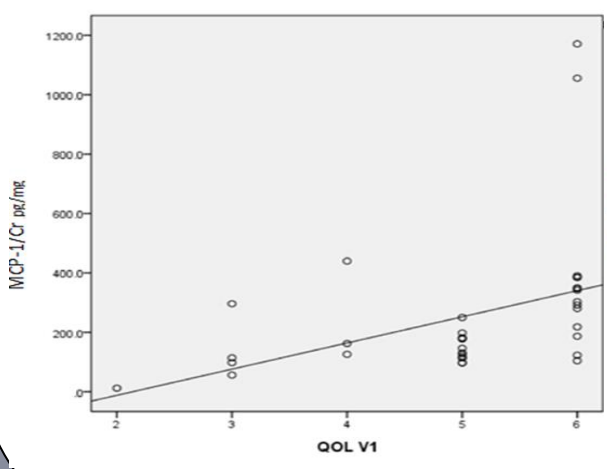
The urinary MCP−1 levels were compared at baseline (pre-treatment) and 3 months (post-treatment). Severity of OAB symptoms were compared at baseline, 1 month and 3 months. Different validated OAB questionnaires were used.

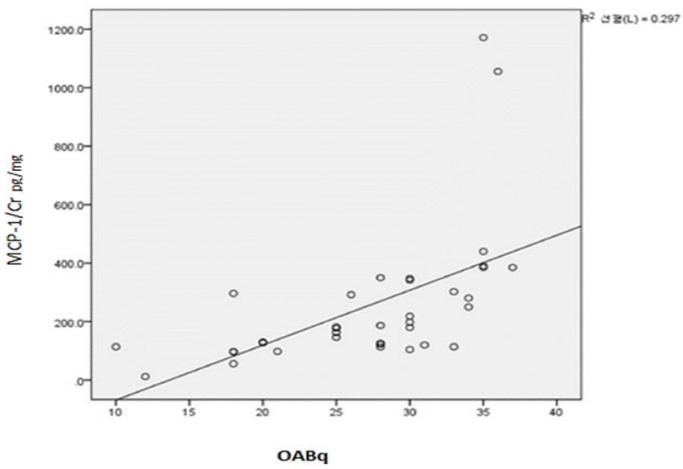
Results





Urinary MCP-1, OAB symptoms, before and after OAB treatments





Relationship between the urinary MCP-1/Cr (mean) and OAB symptoms at visit 1(pretreatment) using Spearman correlation coefficient

Conclusions

OAB-responders had significantly reduced urinary MCP−1 levels in association with a decreased severity of OAB symptoms after treatment.
Understanding the pathophysiology of OAB, neurophysiological signaling in the bladder function, identification of a potential marker, and/or lead to the development of new drug targets for the treatment of patients suffering from OAB