

Can Urinary NGF and BDNF Predict Medical Treatment Success in Women with Mixed Urinary Incontinence?

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To evaluate urinary NGF and BDNF levels in women with stress-predominant MUI and their association with duloxetine response.

Women aged 30–70 years with MUI were prospectively enrolled.

Urinary NGF and BDNF levels were measured before and one month after duloxetine treatment and normalized to creatinine.

Treatment success was defined as complete dryness at one month, and biomarker levels were compared between responders and non-responders and correlated with clinical/urodynamic parameters.

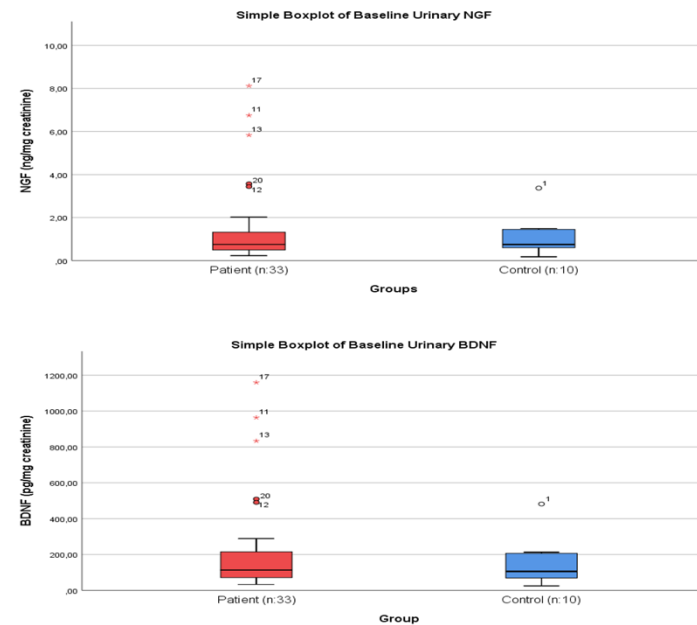


Figure 1. Comparison of Control and Patient Groups

33 patients and 10 controls were included; baseline urinary NGF and BDNF levels were similar between groups.

Urinary **NGF increased after duloxetine**, particularly in patients with urodynamic urinary incontinence ($p = 0.042$).

Baseline **NGF and BDNF were significantly higher in non-responders** than responders ($p = 0.047$ and $p = 0.022$), with no significant associations with urodynamic parameters.

Higher baseline urinary NGF and BDNF levels were associated with failure to achieve complete dryness following duloxetine treatment. However, their limited discriminatory performance limits their predictive utility.

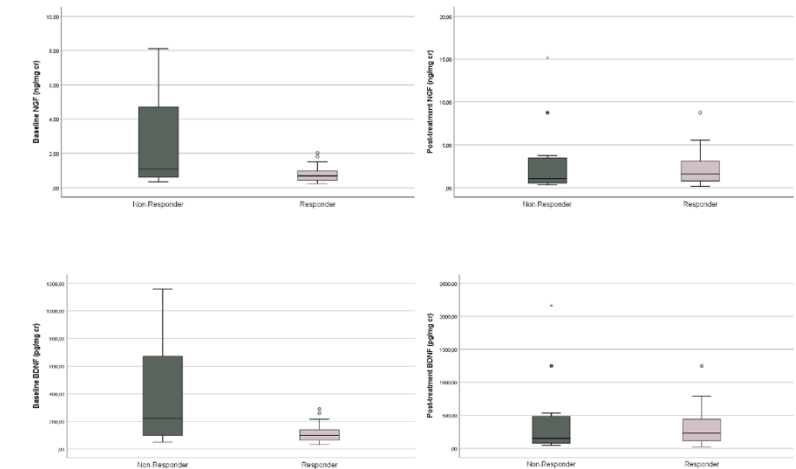


Figure 2. Baseline and Post-treatment Neurotrophic Factor Levels in Responders and Non-responders Groups