## Association Between Overweight and Obesity and Overactive Bladder in Children: A Cross-sectional Study

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## Abstract

**Background:** Overactive bladder (OAB) is a common cause of voiding dysfunction in children and is classified as lower urinary tract dysfunction (LUTD). In recent studies, obesity and overweight are assumed as risk factors for voiding dysfunction and urinary incontinence in children.

**Objectives:** This study was conducted to evaluate the correlation between overweight and obesity with OAB in children.

**Methods:** This cross-sectional study measured BMI in 56 children aged between 3 and 16 years with OAB (case group) and 56 healthy matched children (control group). Overweight and obesity were compared between the two groups. The study also accessed lower urinary tract symptoms and their association with BMI in the OAB children. The data were analyzed using the SPSS software version 18.0 for windows (SPSS Inc., Chicago, IL).

**Results:** The mean age of the OAB patients was  $7.71\_2.65$  years, and 38 (67.8%) of them were female. Frequency and holding maneuvers were the most prevalent complaints. A history of urinary tract infection was detected in 46 (82.1%) of the OAB patients. There were no significant differences in overweight and obesity between the two groups (P = 0.23).

**Conclusions:** No correlation was observed between overweight and obesity with OAB. The reason may be different socioeconomic conditions or malnutrition in these children. Thus, it is recommended to perform a study with a larger sample size in our community

to assess malnutrition in the general children population.

Keywords: Children, Overactive Bladder, Body Mass Index, Urinary Incontinence, Urinary Tract Infection