Inflammatory and oxidative status in neurogenic bladder children after meningomyelocele

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ABSTRACT

**Introduction**: Neurogenic bladder (NB) most often is caused by meningomyelocele (MMC) and manifests with various lower urinary tract dysfunctions. Condition of NB is worsened by inflammatory process or oxidative status imbalance.

**Purpose**: To estimate of urinary uric acid (UA), hs-CRP, thiol status in association with NB function in MMC patients.

**Materials/Methods**: 33 MMC children and 20 healthy individuals were included in the study. The first daytime urine samples were collected from all examined participants and urinary thiol status, hsCRP were measured.

**Results**: MMC children presented higher urinary UA level. The median hs-CRP level were also higher in MMC patients compared to the reference.

**Conclusions**: UA is a marker potentially having direct effect on the bladder function. Disturbed oxidative status and increased markers of inflammation may be a potentially modifiable factors affecting function of lower urinary tract in MMC children.

**Key words**: uric acid, thiol status, C-reactive protein, urodynamics, bladder function