

## Abstract

### PREVALENCE AND TREATMENT OUTCOMES OF

### STANDARD UROTHERAPY IN CHILDREN WITH LOWER URINARY TRACT DYSFUNCTION

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**Introduction:** Lower urinary tract dysfunction (LUTD) is a common problem and may be the risk factor for urinary tract infection and affect the psychosocial development of the child. Prevalence of LUTD in Thai children is not known. Standard urotherapy is the main treatment of LUTD.

**Objective:** 1. To determine the prevalence of LUTD in Thai children aged 4-12 years who did not present with LUTD at the Pediatric Out Patient Clinic, Siriraj Hospital.

2. To evaluate the treatment outcomes of standard urotherapy in those with LUTD.

**Methods:** Children aged 4-12 years were recruited to evaluate LUTD by using dysfunction voiding symptom score –Thai version (DVSS) questionnaire. Girls and boys who scored  $\geq 6$  and  $\geq 9$ , respectively on the DVSS were diagnosed with LUTD and received standard urotherapy. DVSS was recorded at 3 and 6 months after the treatment to evaluate the outcome. Strengths and difficulties questionnaire (SDQ) were recorded in LUTD children.

**Results:** 401 childrens were recruited for DVSS. Mean age was  $7.0 \pm 2.3$  years. 152 childrens (42.9%) was female. LUTD was diagnosed in 47 (11.7%), 33 childrens (70.2%) were female. Difficult elimination symptoms were the most common findings (63.6%). Abnormal SDQ was found in 22.2%, hyperactive/short attention was the most common problem (38.9%). At 3 and 6 months after standard urotherapy, DVSS improved from 8.91 to 6.55 and 3.82 (p-value 0.006).

**Conclusion:** Prevalence of LUTD in Thai children aged 4-12 years was 11.7%. Standard urotherapy can improve DVSS score and thus is recommended for LUTD.

**Keywords:** Lower urinary tract dysfunction, Dysfunction voiding symptom score questionnaire, Standard urotherapy, Constipation