

CONSTIPATED ADOLESCENTS AT HIGHER RISK FOR HAVING DAYTIME URINARY INCONTINENCE: A COMMUNITY-BASED STUDY

Hypothesis / aims of study

To investigate the association between functional constipation (FC) and lower urinary tract symptoms/functions in healthy adolescents

Study design, materials and methods

Healthy adolescents (13-18 years) were enrolled to evaluate the prevalence of FC defined by Rome III criteria and its associations with lower urinary symptoms/function. A self-administered questionnaire was completed by adolescents from junior and senior high schools and the parameters included baseline characteristics (age, gender, body height and weight), symptoms of functional constipation and Dysfunctional Voiding Symptom Score (10 items, 7 related to voiding, score 0 to 3) in the past months. All participants were asked to have one set of uroflowmetry and post-void residual urine (PVR) test to evaluate the lower urinary tract function. Only bell-shaped curves were regarded as normal. Comparisons between groups were made with X² test (categorical), Mann-Whitney test (ordinal) and independent t tests (continuous). A p-value of <0.05 was considered statistically significant

Results

A total of 249 adolescents (mean age, 14.5 ± 1.7 years, boys vs. girls: 103 vs.146) were eligible for analysis. The prevalence of FC was 18.1% and boys were at less odds for having FC (OR: 0.45, 95CI:0.22-0.92). Constipated adolescents had significantly higher daytime wetting (0.09 ±0.29 vs 0.02 ± 0.14; p= 0.01), curtsying(1.59 ±1.00 vs 0.98 ± 1.04; p<0.01), dysuria (0.10 ±0.30 vs 0.01 ± 0.12; p< 0.01)and non-significantly higher wetting severity(0.05 ±0.21 vs 0.01 ± 0.10; p= 0.09), urgency (0.52 ±0.59 vs 0.41 ± 0.63;p=0.14), infrequent voiding (0.59 ±0.97 vs 0.35 ± 0.74; p= 0.18) and abdominal straining (0.12±0.32 vs. 0.07±0.26, p=0.34). Constipation had no significant impact on peak flow rate, abnormal flow patterns and PVR.

Interpretation of results

Constipation defined by Rome III criteria is significantly associated with lower urinary tract symptoms in adolescence. Care should be taken to bowel movement when managing adolescent's lower urinary tract symptoms.

Concluding message

Constipated adolescents have higher scores of lower urinary tract symptom especially regarding to daytime incontinence, curtsying and dysuria.

References

1. Prevalence of Functional Gastrointestinal Disorders in Colombian School Children(J Pediatr 2014;164:542-5).

Disclosures

Funding: Taipei Tzu chi hospital **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** TCRD-95 **Helsinki:** Yes **Informed Consent:** Yes