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AN EPIDEMIOLOGICAL STUDY OF VOIDING AND DEFECATION HABITS IN KOREAN CHILDREN 5-13 YEARS OLD: A NATIONWIDE MULTICENTER STUDY

Hypothesis / aims of study

To evaluate the prevalence of abnormal voiding and defecating habits in Korean children 5-13 years old, and the affecting factors on voiding and/or defecating habits.

Study design, materials and methods

A randomly selected cross sectional study was conducted in 27 kindergartens and 28 elementary schools on nationwide scale in Korea. The total 16,516 children aged 5-13 years were asked to complete questionnaires, which included items about the Nocturnal enuresis (NE), daytime dysfunctional voiding symptoms (DVSs) and abnormal defecating habits. DVSs were included increased or decreased voiding frequency, urgency, daytime incontinence, urge incontinence and holding maneuvers or postpone voiding. Abnormal defecating habits were included constipation, fecal incontinence and difficult or painful defecation.

Results

The overall rate of DVSs, abnormal defecating habits and both of the children were 53.8%, 31.3% and 21.2%, respectively. NE by 919 (6%), DVSs: Increased voiding frequency by 419 (3%), decreased voiding frequency by 720 (4%), urgency by 2,714 (16%), daytime incontinence by 1,854 (11%), urge incontinence by 2775 (17%) and holding maneuvers or postpone voiding 3,888 (24%). Abnormal defecating habits: constipation by 1,103 (7%), constipation on Bristol scale by 1,941 (12%), fecal incontinence by 1,293 (8%) and difficult or painful defecation by 2,609 (16%).

Interpretation of results

Compared to children without DVSs, children with DVSs had a higher prevalence of delayed bladder control, delayed stool control, history of urinary tract infection, father's scholarship, double-income family and lower income. Children with abnormal defecating habits had a higher prevalence of delayed bladder control, delayed stool control, history of urinary tract infection, father's scholarship, mother's scholarship, double-income family and lower income. Children with DVSs and abnormal defecating habits had a higher prevalence of delayed bladder control, delayed stool control, history of urinary tract infection, father's scholarship, mother's scholarship, double-income family and lower income.

Concluding message

This study demonstrates that delayed bladder or stool control, history of urinary tract infection, father's scholarship, double-income family and lower income have a negative impact on voiding or defecation habits in 5-13 year old Korean children.

References

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Neurourol Urodyn (2002) 21; 167-178.
J Urol (2006) 176; 314-324.

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Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	The Korean Enuresis Association
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes