

SCREENING FOR VOIDING DYSFUNCTION BY A VALIDATED QUESTIONNAIRE AMONG PRIMARY SCHOOL CHILDREN IN AN ANATOLIAN CITY

Hypothesis / aims of study

To investigate the incidence of voiding dysfunction (VD) among Turkish elementary school children by a validated voiding dysfunction symptom questionnaire (VDQ)¹. To our knowledge, this is the first epidemiologic study concerning to use a validated VDQ which is composed for only children in our country.

Study design, materials and methods

A total of 3048 children were enrolled in the study. VDQ was filled by the parents of children. A total score of 8.5 and above was accepted as VD.

Results

Of all children 6.5% (n=199) had a score suggesting VD whereas 6.1% (n=185) were found to have nocturnal enuresis (NE) (Table 1). The mean scores of children with and without VD were found to be 13.15 and 1.17, respectively. No significant difference was found between groups (with or without VD) in terms of age, gender and fluid intake. Children with NE had a significant higher score (a mean of 10.9) in VDQ (p=0.000). Children with VD had significant high rate of constipation (8.2% vs. 28.6%; p=0.000) and fecal soiling (26.6% vs. 3.9%; p=0.000) compared to patients without VD. Children with a higher score of VDQ more frequently had behavioral or psychological problems (36.7% vs. 9.8%; p=0.000) and learning disability (25.1 vs. 10.1; p=0.000). The mother's education level and the type of school (whether it is a governor's school or private school) did not have any correlation with VD.

Age (year)	VD (%) (n=199)	NE (%) (n=185)
7	13.12	14.5
8	10.5	9.89
9	8.99	7.77
10	7	5.52
11	4.3	4.12
12	1.3	1.62
13	1.3	0.65
14	1.8	0.92

Table 1: VD and EN incidence among age groups in our study

Interpretation of results

VD has a high incidence in early childhood and VD has a positive correlation with childrens' learning and psychological status.

Concluding message VDQ is a useful tool for investigating VD in epidemiologic studies. Furthermore, children found to have VD on VDQ can be referred for further investigation and treatment.

References

1. Akbal C, Genc Y, Burgu B, Ozden E, Tekgul S. Dysfunctional voiding and incontinence scoring system: quantitative evaluation of incontinence symptoms in pediatric population. J Urol.2005 Mar;173(3):969-73.

Disclosures

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