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REFERENCE VALUES FOR FREQUENCY VOLUME CHART PARAMETERS IN ADOLESCENT AND ADULT ENURESIS PATIENTS

Hypothesis / aims of study

Although reference values of Frequency Volume Chart (FVC) parameters are available for the pediatric population until the age of 11, these are lacking for adolescent and adult enuresis patients. As 2% of the population still suffers from enuresis in adulthood, we aimed to describe reference values for this group.

Study design, materials and methods

Retrospective, descriptive cohort study, in 907 patients between 2003 and 2013, aged 11 years and older, suffering from enuresis of at least one wet night per fortnight, referred to a secondary and tertiary care facility. The main FVC and uroflowmetry parameters of interest were: maximum voided volume (MVV), 24h urine production and nocturnal urine volume including first morning void. Nocturnal polyuria (NP) was defined based on both International Children's Continence Society (ICCS) and International Continence Society (ICS) definitions. The ICCS definition of NP is a nocturnal urine output exceeding 130% of the expected bladder capacity (EBC) for a specific age. The ICS definition of NP is a nocturnal urine volume of more than 20% (in our age group) of the total 24 hour urinary volume. Data of all patients were manually derived from the medical files.

Results

In 41% of men and 30% of women, small MVV for age was present. Prevalence of NP differed substantially when assessed by the ICS or the ICCS definition. NP was present in 96% of our male and 93% of our female population following ICS guidelines. In contrast, following ICCS guidelines, NP was present in 27% of men and 41% of women.

Interpretation of results

The large difference between prevalence of NP when using the ICCS or the ICS definition is striking and intriguing. A possible explanation could be that both definitions have not been validated in the adolescent and young adult age group.

Concluding message

The main causal factors for enuresis, small MVV and NP, were found frequently in our adolescent and adult enuresis patients. NP prevalence is quite different when assessed by using ICCS or ICS definitions. It seems to be advisable that the ICS and ICCS coordinate their recommendations and guidelines, to make results more comparable for outcome research.

Disclosures

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