Are today’s nocturia patients the former bedwetters?
An internet-based national epidemiological survey

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Hypothesis / Aim of study

• 10-20 % men and 25-30 % women aged 18-40 ys have nocturia
• 10 % of all children aged 7 ys and 3 % aged 18 ys suffer from enuresis
• There might be a symptom shift from enuresis to nocturia with the same underlying medical condition
• This study investigated the relationship between nocturia in adulthood and enuresis during childhood

Study design, Material and Methods

• Web-based survey of German subjects ≥ 18 ys of age in 2010
• 30 questions concerning bladder habits (micturition, fluid intake), LUTS (frequency, urgency, voided volumes), family history, concomitant diseases, quality of life (sleep quality, daytime exhaustion)
• 3 groups: 1. present nocturia, 2. present enuresis, 3. controls (neither nocturia nor enuresis)

Results

• Questionnaires answered by 1,201 subjects; prevalences of nocturia = 53.4 %, enuresis = 18.1 %, controls = 28.5 %
• Enuresis in childhood is strong indicator for enuresis in adulthood (p < 0.0001; odds ratio 9.841) and weak indicator for current nocturia (p = 0.0747; odds ratio 1.351)

Interpretation of Results

• Controls: parents of children with enuresis (47.1 %) responding explains their high number of enuresis when starting school (23.9 %) (bias?)
• Therefore our controls are not truly representative and not comparable to other epidemiological studies
• Enuresis had a high proportion of urgency and enuresis in childhood vs. controls.
• Nocturia had a high proportion of urgency in childhood vs. controls (in multivariate analysis no statistical power)
• Relationship of enuresis in childhood and current nocturia or enuresis
• Children with enuresis have considerably greater risk for nocturia or persistent enuresis in adulthood.
• Surprisingly high number of adults suffering from persistent enuresis
• Typical restriction of fluid intake in the evening, but to a lesser extent in the nocturia group
• Quality of life is significantly impaired, also in controls where 47.1 % have bedwetting children

Concluding Message

Bedwetting in childhood is a strong indicator of persisting enuresis in adulthood. The number of adult enuretics might be higher than reported. The relationship between nocturia and childhood enuresis is confirmed. The symptom shift with persistent underlying condition is likely to be demonstrated. Early targeted treatment might reduce number of adult enuretics and improve quality of life.