

THE PREVALENCE OF NOCTURIA IN URINARY INCONTINENT WOMEN AND THE IMPACT ON THE QUALITY OF LIFE.

Aims of Study

The aim of this study was to estimate the prevalence of nocturia in incontinent women in a uro gynaecologic practice and it's association with the general quality of life and disease-specific aspects of the quality of life.

Methods

From the beginning of 2002, all women with complaints of urinary incontinence were analysed according to a specific protocol. They were asked to complete a standardised questionnaire consisting of the urinary distress inventory (UDI), the incontinence impact questionnaire (IIQ) and general quality of life questions from the EORTC QLQ-C30. These are all validated for the Dutch situation. They also underwent multichannel urodynamic testing and a 1-hour ICS-padtest. In addition they had to complete a three-day frequency-volume (FV) chart.

Nocturia was defined as two or more micturitions per night calculated from the FV-chart.

Results

Hundred and twenty incontinent patients were included.

The prevalence of nocturia among the overall group of incontinent women is 46,6% (95%confidence interval: 36,2-57,0%). Table 1 shows the prevalences of nocturia for the different types of urinary incontinence. The prevalences in the group of patients with mixed- and urge-incontinence are considerably higher than in the stress incontinent group.

Table 1: prevalences of nocturia for the types of urinary incontinence (percentages)

Nocturia:	Intake diagnosis:			
	stress	mixed	urge	overall
0	30,8	4,5	9,1	21,6
1	30,8	31,8	36,4	31,8
2 or more	38,5	63,6	54,5	46,6

Table 2 shows the prevalence of nocturia for different age categories. The mean age in our patient group was 53,4 years.

Table 2: prevalences of nocturia for the different age categories (percentages)

Nocturia	30-40 (N=12)	40-50 (N=22)	50-60 (N=34)	60-70 (N=11)	>70 (N=10)	Total (N=89)
0	16,7	40,9	14,7	18,2	10	21,6
1	25	31,8	38,2	45,5	20	31,8
2 or more	58,3	27,3	47,1	36,4	70	46,6

There was no significant difference in the general QOL-score between nocturics and non-nocturics.

The nocturic patients scored however higher (indicating more bothersomeness) on a 0-100 scale on several domains of the disease-specific aspects of the quality of life questionnaire. (Table 3) There were significant differences in the mean scores on the UDI's overactive bladder and obstructive micturition. The mean scores on the IIQ's shame, social impact and impact on mobility were also significantly higher in nocturics than in non-nocturics.

Table 3: Student's T-Test on the mean score (0-100 scale) of the different domains of the questionnaire between nocturics and non-nocturics

Domain	Nocturia	No nocturia	p-value
QOL(0-10 scale)	6,56	6,47	0,870
UDI overactive bladder	55,56	28,33	0,007
UDI incontinence	54,17	50,48	0,506
UDI obstructive micturition	37,72	18,94	0,042
UDI pain	36,84	34,09	0,788
UDI prolaps	16,67	19,56	0,740
IIQ physical	21,67	18,94	0,741
IIQ mobility	51,11	22,73	0,001
IIQ social	19,14	6,35	0,026
IIQ shame	36,46	17,46	0,022
IIQ emotional	38,60	22,75	0,077

Conclusions

The prevalence of nocturia in a urinary-incontinent patient group is 46,6%. This is considerably higher than the 17% found in the general Dutch population. (1)

There are significant differences between nocturics and non-nocturics on several domains of the disease-specific aspects of the quality of life, although not in the general quality of life score.

Nocturia has a negative impact on several aspects of the quality of life in urinary incontinent patients.

References

- 1 Van Dijk, L., Kooij, D.G.and Schellevis, F.G. Nocturia in the Dutch adult population. BJU International, 2002, 90, 644-648