

USING THE CIRCUMSTANCES OF SYMPTOM EXPERIENCE TO ASSESS THE SEVERITY OF URGENCY IN THE OVERACTIVE BLADDER

Hypothesis / aims of study

We tested the hypothesis that describing the symptoms of urgency according to the circumstances of their experience, might prove discerning in respect of the severity of disease symptoms. We hypothesised that symptoms experienced when voiding opportunities are presenting; urgency when arriving home (Latchkey urgency) and on waking and rising in the morning, would differ from symptoms resulting from intrusion of a stimulus; running water urgency and cold weather urgency, which in turn would differ from urgency associated with mood. Intuitively these stimuli seem to represent different mechanisms

Study design, materials and methods

This was an observational study of a cohort. Data were collected prospectively from 5423 consultations on 1797 patients (158 males and 1639 females), with a mean age of 52 (SD=31), being assessed and treated for the overactive bladder. The study was conducted over five years. The reported frequencies and incontinence episodes were recorded. Using ranked ordinal scales ("None, Mild, Moderate, Severe"), the symptoms of urgency and urge incontinence associated with waking and rising, hearing running water, arriving home ("latchkey"), cold weather and when feeling tired or worried (Mood) were noted. "Cold weather" and "Mood" were recorded for urgency only and not incontinence. Urgency and urge incontinence, without reference to the circumstances, were similarly assessed, as was the patients' assessment of response to treatment

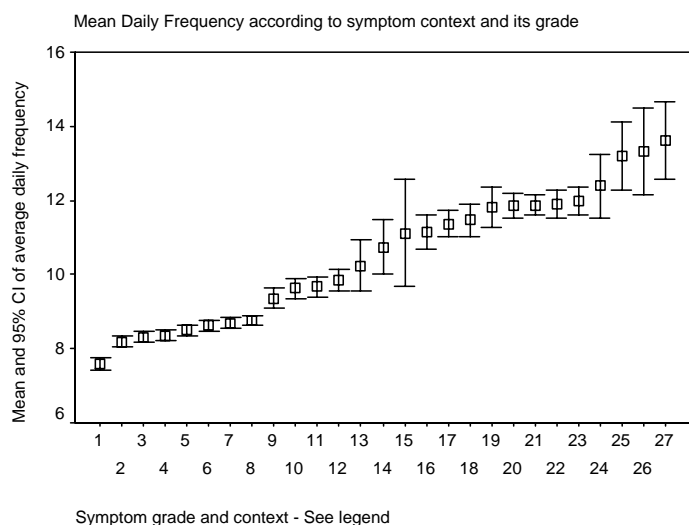
Results

Reported urinary frequency and incontinence episodes were strongly associated with the patients' grading of treatment response. Therefore the symptoms, assessed according to their circumstances, were compared with disease activity by using frequency and incontinence episodes. The patients' grading of urgency and urge incontinence in isolation did not provide a discriminating scale. By contrast, the description of the symptoms in relation to their circumstances showed clear associations with frequency and incontinence which progressed with increased severity across a wide scale. The least experience of disease was associated with the pair "waking rising" and "latchkey" symptoms. Then followed symptoms precipitated by "running water" paired with "cold weather" exacerbation. Aggravation by fatigue or worry was associated with the greatest disease severity. (ANOVA $F=8.9$, $p<0.001$). This scale ranged from frequencies of 7-times-daily to 15-times-daily and incontinence episodes through zero to four times daily.

Interpretation of results

The figure describes the distribution of mean daily frequencies with 95% confidence intervals across the ranked ordinal scales. The situations of latchkey and waking were associated with the lowest frequencies. Urgency exacerbated by cold and the sound of running water tended to be ranked next. The experience of mood affecting urgency was associated with a greater displacement up the scale for each of the three ranks. This pattern was broken with "Mild urgency". In this sector the confidence intervals were wide, reflecting the small sample sub-sets. Therefore, "Mild" and "Moderate" were pooled, to increase sub-set size. Given that, the pattern was consistent other than at the extreme of the last three points "Severe incontinence", where sub-set samples were also small.

Figure



1. Waking rising urgency (none)
2. Latchkey urgency (none)
3. Cold weather urgency (none)
4. Running water urgency (none)
5. Waking rising incontinence (none)
6. Latchkey incontinence (none)
7. Mood urgency (none)
8. Running water incontinence (none)
9. Latchkey urgency (moderate)
10. Waking rising urgency (moderate)
11. Cold weather urgency (moderate)
12. Running water urgency (moderate)
13. Latchkey incontinence (mild)
14. Waking rising incontinence (mild)
15. Running water incontinence (mild)
16. Mood urgency (moderate)
17. Waking rising incontinence (moderate)
18. Latchkey incontinence (moderate)
19. Running water incontinence (moderate)
20. Latchkey urgency (severe)
21. Waking rising urgency (severe)
22. Running water urgency (severe)
23. Cold weather urgency (severe)
24. Waking rising incontinence (severe)
25. Mood urgency (severe)
26. Running water incontinence (severe)
27. Latchkey incontinence (severe)

Concluding message

This study has furnished data that would support the hypothesis that by qualifying the experience of urgency through the identification of the situation, in which it occurs, seems to provide a means for quantifying this symptom in a clinically apposite manner.