

Standardization of terminology in nocturia: commentary on the ICS report

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Introduction

Over the past 3 years a sub-committee of the Standardization Committee of the ICS has discussed a range of issues related to nocturia. These discussions resulted in the report which was published elsewhere [1], and is reproduced in this supplement (page 11–15). The report provides definitions and recommendations that aim to improve the diagnosis and treatment of nocturia; this paper is a brief commentary on that report.

What is nocturia?

Nocturia is defined as waking at night to void; the ICS committee concluded that the number of voids per night is not important for definition purposes, as long as the patient is awake before voiding and they return to sleep afterwards. When considering how to define 'night' the committee concluded that night is the time spent in bed with the intention of sleeping. As many people will go to bed for reasons other than sleep, the night does not begin until they stop the other activity and begin to go to sleep. Voiding urine during non-sleep activity is not defined as nocturia. Importantly, nocturia is not the same as enuresis, which is a condition in which voiding occurs while the person remains asleep.

The diagnosis of nocturia

Nocturia is a complex condition that has many causes. Therefore, the ICS committee recommended that diagnosis should follow a specific algorithm, which should form the framework within which the physician can make an accurate diagnosis and decide on the appropriate clinical course of action. Nocturia is likely to have mixed causes and this should always be considered.

There will always be a proportion of patients who, despite experiencing nocturia, are not bothered by the condition. These patients are very unlikely to present to their physician for treatment, unless the nocturia is a problem for either their partner or a caregiver. Nocturia can be associated with other LUTS. Any patient presenting with these symptoms should always be investigated thor-

oughly even if the nocturia itself is not perceived to be a problem by the patient.

In a proportion of cases nocturia can result from the behaviour of the patient. The ICS committee recognized that simple lifestyle advice, such as reducing liquid/food volume intake before bedtime, may eliminate the need to void at night.

Further investigations

The ICS committee emphasized the importance of obtaining a frequency/volume chart (voiding diary) over 24–72 h for each patient. The data so generated should enable the physician to determine whether nocturia is caused by 24-h polyuria, nocturnal polyuria or bladder storage problems. While it may also be beneficial to measure the effect of nocturia on quality of life, a specific tool for this purpose has yet to be developed.

Polyuria/nocturnal polyuria

The ICS committee defined polyuria as a 24-h urine volume of > 40 mL/kg body weight. Polyuria can be caused by diabetes mellitus and diabetes insipidus, and such possibilities should be excluded using the appropriate specialized tests.

Nocturnal polyuria is defined as the production of excessive volumes of urine during sleep. Nocturia will result if nocturnal urine volume exceeds the functional bladder capacity. In patients with normal 24-h urine output, the ICS committee recommended expressing the nocturnal urine output as a percentage of the total 24-h volume. This percentage will be lower in the young ($\approx 20\%$) than in the elderly ($\approx 33\%$) and inter-individual variation is also to be expected. The many potential causes of nocturnal polyuria are listed in the ICS document to guide further investigation.

Bladder storage problems/sleep disorders

If polyuria and nocturnal polyuria can be excluded as the cause of nocturia, then it is likely that the patient has either a bladder storage problem or a sleep disorder. The

possible causes of problems related to bladder storage are provided in the ICS document and the need for clinical judgement is emphasized.

For many patients with apparent bladder storage problems, the real problem is sleep disturbance. A consideration of sleep disorders potentially related to nocturia may help determine whether further investigation in a sleep laboratory is necessary.

Conclusions

Nocturia is a common complaint, which often has many causes. The ICS Standardization Sub-committee has recommended a diagnostic algorithm for nocturia and this should help physicians to diagnose and treat patients more effectively. In addition, the recommendations for the ter-

minology used in nocturia should lead to the standardization of future clinical trials. This will improve the validity of comparative evaluations of clinical trials designed to measure the efficacy of treatments for nocturia.

Reference

- 1 van Kerrebroeck P, Abrams P, Chaikin D *et al*. The standardization of terminology in nocturia: Report from the standardization sub-committee of the International Continence Society. *Neurourol Urodyn* 2002; 21: 179–83

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