

Desmopressin

A Viewpoint by Lars Malmberg

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Nocturia, defined as a complaint of waking at night to void, has only recently become recognised as a clinical entity on its own. Prevalence studies show that nocturia is very common, especially in the older age groups. There are several medical conditions that may cause nocturia (e.g. primary polydipsia, diabetes mellitus and insipidus, congestive heart disease, sleep disorders and problems related to bladder storage) and it is therefore important to follow a structured method in the clinical assessment of patients presenting with this complaint.

Desmopressin is a synthetic analogue of antidiuretic hormone. It produces a marked antidiuretic effect, but is devoid of vasopressor and uterotonic effects of the native hormone. For many years, desmopressin has been successfully used in the treatment of children with primary nocturnal enuresis. Recently, desmopressin has been approved for

the treatment of patients with nocturia associated with nocturnal polyuria (defined as nocturnal urine volume exceeding 33% and 20% of the total 24-hour urine volume in elderly and younger patients, respectively).

Randomised clinical trials indicate that desmopressin significantly reduces the number of nocturnal voids and prolongs the initial sleep period, an important indicator of sleep quality, thereby substantially improving the patient's quality of life. Hyponatraemia is potentially the most serious adverse effect of desmopressin. The risk of clinically significant hyponatraemia with desmopressin use is relatively low in patients <65 years of age. However, the risk is significantly higher in elderly patients, thus limiting the clinical use of the drug in the age group in which nocturia is most prevalent. Although there is no single drug of choice for the treatment of nocturia, desmopressin is most certainly an important option in the therapeutic armamentarium. ▲