key points

SELECTED BY
Dr Peter Saul
GP, Wrexham and associate GP Dean for North Wales

Nocturnal enuresis is a common condition and is defined as involuntary wetting while asleep at least twice a week in children over the age of five. Primary nocturnal enuresis describes those children who have always been wet. Secondary nocturnal enuresis is defined as a relapse after a child has been completely dry for at least six months. Up to the age of nine years, nocturnal enuresis is twice as common in boys than girls but thereafter there is no sex difference in prevalence. At the age of five, 2% of children wet every night, and 1% are still wetting every night in their late teens.

Bedwetting is not primarily caused by an underlying psychological disorder. However, psychological problems and life events can exacerbate or precipitate bedwetting in susceptible children who have an underlying genetic basis for their condition. Children with bedwetting suffer many psychological sequelae and it can cause severe emotional and financial stresses on the family.

The three systems approach to the management of the condition addresses: poor arousal from sleep, nocturnal polyuria and bladder dysfunction. Most parents say that their enuretic child is a deep sleeper. In fact, the problem seems to be poor non-specific arousal to any stimulus, even in light sleep. Many children with nocturnal enuresis have nocturnal polyuria. This is usually caused by an inadequate rise in vasopressin levels at night, with consequent increased urine production. Some children with nocturnal enuresis also have bladder dysfunction, usually due to a small overactive bladder. They may wet several times in one night and sometimes wake after they are wet. Many children with nocturnal enuresis have a mixed picture with all three systems involved.

Bedwetting is occasionally caused by underlying medical conditions; primarily urological, neurological, or metabolic. It can also be associated with obstructive sleep apnoea. However, these causes are uncommon in primary enuresis. A basic history and examination should exclude these conditions. If the bedwetting has started in the past few days or weeks, systemic illness should be considered e.g. UTI, diabetes mellitus. With secondary enuresis, symptoms or signs of medical and psychological conditions or life events may be elicited as possible causes, and may need separate treatment.

Reward systems should only be used for agreed behaviours which are under the voluntary control of the child, they should not generally be used for dry nights. The parents and child should be informed that the wetting is not the child's fault, and that punitive measures are not helpful. Alarm treatment should be considered in any child over seven. The alarm takes several weeks to be effective and needs commitment from both child and carers. Desmopressin may be used as first-line treatment if rapid onset and/or short-term improvement is the priority of treatment or an alarm is inappropriate or undesirable. Desmopressin should be given in the hour leading up to bedtime.