ABC of 1 to 7

H B VALMAN

ENURESIS

Wetting the bed is normal at birth, a nuisance at 5 years, and then it becomes increasingly disturbing for both child and mother. Siblings who share the same room or bed and the father whose living room is dominated by wet sheets resent the problem. Ten per cent of children still wet the bed at the age of 5 and 14% of these become dry each succeeding year. The electric enuresis alarm (buzzer) is an effective aid but an enthusiastic teacher of the use of the alarm contributes to its success.

History

The mother should be asked what is the longest period that the child has been dry at night. If he has been dry for at least two nights in succession there is likely to be no structural abnormality. If the enuresis started after a long period of dryness a precipitating event should be sought. Ten per cent of children with enuresis also wet themselves during the day, and this does not alter the diagnosis or management.

A urinary tract infection may cause frequency of micturition and enuresis while a poor stream in boys suggests an abnormality of the urinary tract. A neurological abnormality severe enough to cause bladder problems will usually interfere with walking.

The reason for referral at a particular time rather than earlier may indicate the need for treatment. The child may be motivated to change—for example, because he wants to go to a camp.

Enuresis to a late age in one of the parents suggests a familial pattern. Delay in other aspects of development may show that the child has other abnormalities. If the child is about 3 years old marital discord between his parents or evidence of severe stress, such as admission to hospital, maternal illness, or moving home may suggest precipitating factors.

Examination

Microscopy

Culture

Glucose

Enlarged kidneys or bladder and midline naevi or other markers of spinal abnormality should be sought. The reflexes at the ankles, gait, and sensation over the sacral area should be examined. In every case a sample of urine must be sent to the laboratory to exclude infection, and glycosuria can be excluded by a dip test. Unless there is a specific indication other than enuresis an intravenous pyelogram should not be performed.

Treatment

No treatment is indicated for a child under the age of 4½ years. Ideally the parents and child should be seen together at first and then the child separately. The child should be given an opportunity to explain what he feels and to be shown that he is the patient and that his co-operation is necessary for success.

Fluid restriction is not helpful. Charts with stars provide a method whereby the child keeps records himself. Young children enjoy filling the spaces, and the recording of dry nights should be emphasised. Some children become completely dry after using a chart for a few weeks without any other treatment. On the other hand, some paediatricians find that this method is very disheartening to the child who is not successful.

Lifting the child on to a potty before the parents go to sleep is sometimes associated with a dry bed in the morning. This treatment can be used until a decision is made to use a buzzer.

Buzzer treatment

Children over the age of 6 use the alarm easily but it can be successful at the age of 5. Whether the child sleeps in his own bed and in his own room will determine whether a standard buzzer can be used. Temporary changes in sleeping arrangements may be necessary to prevent others in the room being woken by the buzzer. A special alarm which vibrates the pillow can be used where sleeping arrangements cannot be changed and for children who do not wake when the buzzer sounds.

Hospitals, health centres, and local health clinics have stocks of alarms, but expert advice on the use of the buzzer is needed from a committed person. This could be a doctor, nurse, or health visitor. The child and mother must be shown how to arrange the alarm in the bed and how to test it.

The child sleeps on a sheet which separates him from a detector—a metal mesh—connected to an alarm buzzer. Urine completes the circuit. The alarm wakens the child, who gets out of bed, turns off the alarm and goes to the lavatory. The amount of urine passed before the child wakes becomes progressively smaller for he either wakes before the alarm starts or he sleeps throughout the night without passing urine. The child should be seen a week after issuing the alarm and then at longer intervals. After he has been dry for six consecutive weeks the alarm is removed from the bed but kept at home ready for use if necessary for a further six weeks. About 80% of the children become dry within four months and most within the first two months of treatment. About 10% of children relapse but respond quickly to a second course of treatment with the alarm.

Five to 20% of children will still be wetting the bed after four months' treatment and these should be given a respite of a year before using the alarm again.

Drugs and psychiatrists

Tricyclic antidepressants have been used successfully in enuresis but there is a high relapse rate when the drug is stopped. A disadvantage of this treatment is that the pleasant-tasting medicine has caused severe side effects and death through children taking overdoses. These drugs cannot be recommended.

When enuresis is a part of an emotional disorder the child should be referred to a child psychiatrist. Chronic constipation or the passage of formed stools in inappropriate places may occur with enuresis in a severely disturbed child. Enuresis starting after a long period of dry nights suggests a precipitating cause—for example, separation of parents. If buzzer treatment has failed, the possibility of an underlying emotional cause should be sought.

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