

Drugs for bed-wetting

Drugs hold a fairly dishonourable position in the treatment of nocturnal enuresis. In 1974 we may laugh at the prescription of 'ground hedgehog and white hyacinthamum flowers' for children who were wetting their beds in the year 1500 B.C., but we cannot doubt that our successors in future millenniums will consider our drug therapies equally bizarre.

In any condition that has a high spontaneous cure rate, claims of successful treatment must be viewed with caution. The report by Forsythe and Redmond (page 259 of this issue) is a timely reminder of the high spontaneous cure rate of enuresis. In a large and detailed study they found that between the ages of 5 and 10, when paediatricians tend to be consulted about enuresis, the spontaneous cure rate was 14% per year. Over the age of 10 the annual spontaneous cure rate was even higher. Therefore, treatment has to improve on these rates considerably in order to be worth while.

A recent comprehensive monograph on bladder control and enuresis makes it clear that the most effective therapy in the hands of either the enthusiastic or the disillusioned doctor is the buzzer alarm (Kolvin, Mac Keith, and Meadow, 1973b). The question that needs to be asked is whether drugs have any place at all in the management of bed-wetting, particularly as many of them are expensive and others are addictive or dangerous.

A great variety of drugs have been tried for nocturnal enuresis. Far fewer have been subjected to rigorous controlled trials. They have been reviewed in masterly fashion by Blackwell and Currah (1973), and anyone wondering whether to try a new drug or conduct a drug trial for enuresis should consult their review first. The tricyclic antidepressants are the only drugs that have consistently been shown to be superior to placebo. The two most commonly used are imipramine (Tofranil) and amitriptyline (Tryptizol). Their mode of action is uncertain and is more likely to be the result of their anticholinergic activity than either their antidepressant effect or the interference with sleep and arousal processes. Though there is a

general lack of information about the type of enuresis most likely to respond to drugs, there is some evidence that they are more effective for girls, for secondary (onset) enuresis, and for severe enuresis (Shaffer, Costello, and Hill, 1968; Kolvin *et al.*, 1973a).

Complete cessation of wetting is less common than a mere reduction in the number of wet nights. Up to 40% of children may become dry within a month of taking a tricyclic antidepressant, but a high proportion relapse once the drug is discontinued. The relapse rate is considerably higher than it is for most other methods of treating enuresis.

Management of nocturnal enuresis is a rewarding art which requires an enthusiastic doctor who is willing to use a variety of different strategies with confidence according to the particular needs of the child and family. A contribution of empathy and energy in sorting out simple family and social situations will cause immediate cure in some children. For the rest, drugs may play a part, though probably a small one. My personal preference is for their use in children who need quick proof that it is possible to be dry, or who need to be dry quickly for a specific occasion such as school camp, and also for those who are unable to use the buzzer alarm because of the home situation or their age. Some with great experience of buzzer alarms claim that by careful attention to detail the alarms can be used on most children over the age of 5 (Dische, 1973); but others of us who are less skilful find them difficult to use on children below the age of 7.

A simple drug treatment regimen is a starting dose of 25 mg imipramine. The dose is increased at fortnightly intervals by 25 mg, up to a maximum of 75 mg. The effective dose and the dose likely to cause side effects vary considerably from child to child. The commonest reason for having to stop the drug is the onset of mood or sleep disturbance as the dose is increased. If the child regularly wets before midnight it may be better to give the drug at 4.00 p.m. (Alderton, 1970).

The doctor prescribing drugs for enuresis knows that the drug is unlikely to produce permanent cure;

but suppression of a troublesome symptom is a highly respectable pursuit for any doctor—particularly when 14% of the patients are going to lose that symptom permanently during the ensuing year.

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