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Enuresis Again

Enuresis is an ever present problem for the children's parents, for it causes them an immense amount of unpleasant work, and it seems to be unending—continuing week after week, month after month, and year after year. To many children it is more than just unpleasant at night. They are apt to be scolded in the morning and given sermons in the evening. Both courses are singularly irrational, for the child can hardly be blamed for what he does in his sleep. If he wets by day as well, he is apt to be ostracized by his siblings and given offensive nicknames at school because of the smell. It is calculated that about half a million bedwetters are attending schools in England and Wales. About 10% of all children are still wetting at least occasionally when they start school. Numerous articles on the subject continue to appear, and in spite of the evidence to the contrary[1] there are still doctors who regard enuresis as nothing more than a psychological problem.

A recent article[2] is of particular interest because it aimed at providing a descriptive analysis of an unselected sample of bedwetters and comparing the effect of imipramine, the electric buzzer (pad and bell), and a placebo. Through the school medical service at Newcastle upon Tyne I. Kolvin and colleagues, members of the department of psychiatry in the university, surveyed 2,472 children in 15 schools and studied 94 bedwetters in detail, submitting them to a range of tests, and then dividing them at random into three groups for treatment. Their mean age was 9 years 4 months; there was a slight preponderance of boys. The mean age of walking without support was a little late (15·9 months), but as a milestone it is not a good measure of development. Among the wetters there was no unusual incidence of ambidexterity, coercive toilet training, or personality deficits, but there was a rather high incidence of parental divorce or separation, a lower social class, a larger family size, and rather more behaviour problems. In over 60% there was a family history of bed wetting. And 78% were of the primary type, never having been dry.

Imipramine was rapidly effective and significantly better than a placebo, but relapse on discontinuing it was frequent. The electric buzzer gave a slower response, but was highly significantly more effective than the placebo, and the relapse rate was low—in fact lower than that of the imipramine group.

The authors discussed the various theories about enuresis, including those of S. H. Lovibond.[3] He has suggested that enuresis is due to faulty learning or conditioning, or difficulty in conditioning, or a breakdown of acquired habit as a result of psychological stress. Kolvin and colleagues did not consider that the causes were mainly psychological, though they agree that psychological factors resulting from scolding and other unpleasantness were often superimposed on other causes, particularly maturational delay, exaggerated by errors of training. Since some children of comparable intelligence are later than others in all other aspects of development—smiling, chewing, sitting, walking, talking, reading, and other skills—it would be indeed surprising if some were not also late in controlling the bladder. One obvious explanation would be delay in maturation of the relevant part of the nervous system. It is difficult to disagree with F. J. W. Miller's comment[4] that "the social correlations were such that it is reasonable to think that most enuresis occurs in a child with a slow pattern of maturation when that child is in a family where he does not receive sufficient care to acquire proper conditioning. We doubt if the continuous type of enuresis is caused by major psychologic difficulties at the outset, though we acknowledge that psychologic difficulties can occur as an overlay."

In the treatment of this condition imipramine is often an effective drug, like the other tricyclic antidepressants. It is not helpful to change from one to another (for example, to amitriptyline or nortriptyline) if imipramine fails. The possibility of side effects should be borne in mind. R. S. Illingworth[5] listed some 33 known side effects. The makers of imipramine recommend a dose of 25 mg at night for children from 5 to 12 years but a dose of 50 mg at night for an average child of 5 to 7 or 8 may be needed, and 75 mg for an older or bigger child, though the physician should be reluctant to exceed the dose recommended by the makers. It is wise to discontinue the drug as soon as possible—but then relapse is common.

Taken as a gross overdose (the child having helped himself to a bottle of his own or his mother's tablets), imipramine is highly dangerous. J. M. Parkin and M. S. Fraser[6] found that between 1962 and 1969 31 children had died of imipramine poisoning; their age was 9 months to 5 years. The symptoms are mainly convulsions and those of severe myocardial damage. Severe symptoms are usual when the dose exceeds 20mg/kg body weight. There is no specific antidote, treatment being mainly supportive and symptomatic, preferably in an intensive care unit.

The electric buzzer is a highly effective method of treatment provided that (1) it awakens the child; (2) the child has to get out of bed to stop the buzzer; (3) the child has the buzzer long enough—rarely less than three months. But it is not free from risks.[7 8] If the pad is carelessly used in a disarranged bed, ulceration of the skin can occur. And unless a reliable make is used and properly connected up there could theoretically be a danger of electric shocks.

It is not fair to tell a mother that "he will grow out of it" and do nothing more to help her with a distressing problem. Nor is it enough merely to prescribe a tricyclic antidepressant and forget its possible risks, or to supply a buzzer and not try to ensure that it is used properly. In any case the doctor should try to stop parental scoldings, reprimands, and other causes of superadded psychological problems.

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