Cochrane Corner

Nocturnal enuresis

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Nocturnal enuresis is the involuntary loss of urine at night, in the absence of organic disease, at an age when a child could reasonably be expected to be dry (by consensus, at a developmental age of five years). Although bedwetting in itself is pathologically benign and has a high rate of spontaneous remission, it may bring social and emotional stigma, stress and inconvenience to both the person with enuresis and their families. Children who wet the bed may experience parental disapproval, sibling teasing and repeated treatment failure which may lower self esteem. The children may also be at increased risk of emotional and physical abuse. Consequently, it is important that enuresis is properly managed on 'humane grounds'.

Although daytime wetting is a significant problem and is often associated with bedwetting, it is usually considered separately. It has been suggested that there are different aetiologies underlying monosymptomatic nocturnal enuresis and daytime wetting. If daytime symptoms are present, investigations to identify physical causes such as urinary tract dysfunction, congenital malformation

and neurogenic disorders are usually necessary. An organic cause is more often found in children with daytime wetting; for example more structural abnormalities and functional disorders of the urinary tract are found in daytime wetters than controls.

A wide variety of methods have been studied including alarms, tricyclic antidepressants, Desmopressin, alarm plus medication and reward systems and waking at three hours. The effective treatments are on the table below. Amphetamine, frusemide and meprobamate were all shown to be ineffective.

Table showing effective treatments for bedwetting

	Initial success	Long term success	Advantages	Disadvantages
Alarm	Yes, 14 dry nights	9x less likely to relapse than on Desmopressin	Safe	Takes time to have effect and needs parent and child cooperation
Tricyclic	Yes, 5x better than placebo	No better than placebo	Effective within days	Risk of overdose and adverse effects
Desmopressin	5x better than placebo	No better than placebo	Effective within days few side effects	Some reports of water intoxication
Alarm and medication	Yes	Not studied	More rapid effect than alarm alone	Adverse effects of medication
Reward systems, lifting and waking at three hours	Better than controls	Benefit not sustained	Safe	More input from family

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