

Limited evidence for benefits of tricyclics for nocturnal enuresis

Clinical Question	Compared to placebo and other treatments, how effective are tricyclic and related drugs for treating children with nocturnal enuresis?
Bottom Line	Tricyclics and related drugs (grouped together here as tricyclics) were more effective than placebo or no treatment, particularly for short-term responses (14 consecutive dry nights). The tricyclics imipramine, amitriptyline and desipramine were more effective than placebo, but there was no difference for nortriptyline and mianserin. Most tricyclics did not have a sustained effect and participants relapsed at follow-up after cessation of treatment. There was limited, very low-quality evidence that combining tricyclics with other therapies such as anticholinergics might be effective. Reported adverse events were usually of minor consequences, but some trials did not give details of the nature or severity of the side effects. Alarm therapy was superior to tricyclics, with significantly more children achieving 14 consecutive dry nights. Alarm therapy also had a more sustained response, with 42% dry after cessation of treatment, compared with none after cessation of imipramine.
Caveat	The trials were mostly small and of poor quality, with 30 studies having 50 or fewer participants. Most comparisons or outcomes were addressed only by single trials, precluding meta-analysis. The small sample sizes resulted in wide confidence intervals and imprecision which could obscure or overestimate underlying treatment effects. Most of the trials had insufficient follow-up, with only 18 studies following participants for at least three months after completion of treatment.
Context	Enuresis affects up to 20% of five year-olds and 2% of adults. Although spontaneous remission often occurs, the social, emotional and psychological costs can be great. Tricyclics have been used to treat enuresis since the 1960s.
Cochrane Systematic Review	Caldwell PHY et al. Tricyclic and related drugs for nocturnal enuresis in children. Cochrane Reviews, 2016, Issue 1. Art. No.: CD002117.DOI: 10.1002/14651858. CD002117.pub2. This review contains 64 studies involving 4,071 participants.

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