TOOLS FOR PRACTICE #421 | September 14, 2026

TOOLS FOR PRACTICE

PEER PATIENTS EXPERIENCE EVIDENCE RESEARCH

Happiness is a Dry Bed: Desmopressin for pediatric nocturnal enuresis

CLINICAL QUESTION

Does desmopressin reduce bedwetting for children with nocturnal enuresis?

BOTTOM LINE

Desmopressin increases the proportion of children achieving 14 consecutive dry nights ("complete response") at 2 weeks from 10% (placebo) to 32%. Desmopressin also decreases wet nights by ~2 per week over placebo with similar adverse effects. Short-term efficacy is similar to enuresis alarms but alarms may have lower relapse rates. More children will have complete response with desmopressin-alarm combination (53%) versus desmopressin alone (42%).

EVIDENCE

- Results statistically significant unless stated.
- Most recent systematic review of randomized controlled trials (RCTs). Ages 5-16 years.[1]
    - Desmopressin 100-800mcg orally versus placebo:
        - "Complete response" (14 consecutive dry nights); (11 RCTs, 922 patients). At 14 days:
            - 32% versus 10% (placebo); number needed to treat (NNT)=5.

            - Lower and higher doses: No difference.
        - Mean wet nights (16 RCTs, 1267 patients, baseline: 5). At 28 days:
            - ~1.8 fewer nights/week over placebo.
        - Adverse effects: No difference.
    - Desmopressin (intranasal/oral) versus enuresis alarm. At 3 months:
        - Complete response (15 RCTs, 1530 patients):
            - No difference.
        - Relapse after discontinuation (6 RCTs, 685 patients):
            - 67% versus 56% (alarm); number needed to harm (NNH)=9.
    - Desmopressin plus alarm versus desmopressin:
        - Complete response (5 RCTs, 370 patients). At 4 months:
            - 53% versus 42% (desmopressin); NNT=10.
        - Mean wet nights (2 RCTs, 156 patients). At 84 days:
            - Combination: ~0.9 fewer nights/week.
        - Relapse after discontinuation (2 RCTs, 161 patients). At 12 weeks:
            - 68% versus 86% (desmopressin); NNT=6.
    - Desmopressin plus alarm versus alarm:
        - Mean wet nights (6 RCTs, 528 patients). At 70 days:
            - Combination: ~0.8 fewer nights/week.
- Other systematic reviews[2,3] and newer RCTs found similar.[4]
- Limitations: Many small RCTs with selective outcome reporting.

CONTEXT

- Guidelines:[5]
    - Education first-line, alarms second-line.
    - Then desmopressin intermittently (e.g., sleepovers); daily if needed (consider electrolyte monitoring every 3 months).
    - Trial discontinuation every 3 months.[5]
- Desmopressin may work on first night.[1] Dose 30-60 minutes before bed.[5]
- To avoid water toxicity:
    - Limit fluids from one hour before dosing until morning: ~200mL.[5]
    - Intranasal spray not recommended.[5-6]
- 120mcg melt=200mcg tablet.[5]
- Cost (30-day):[7]
    - 200mcg tablet: ~$55.
    - 120mcg melt: ~$100.

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