DEXTROAMPHETAMINE (Dexedrine, Dextrostat, Liquadd, ProCentra, Zenzedi) Fact Sheet [G]

Bottom Line:

Dextroamphetamine is the dextro-isomer of racemic amphetamine. It has a long history of safe use in children, and is available in short- and long-acting formulations as generics.

FDA Indications:

ADHD (children ≥ 3 years); **narcolepsy** (adults and children ≥ 6 years).

Off-Label Uses:

Obesity, treatment-resistant depression.

Dosage Forms:

- Tablets (Dexedrine, Dextrostat, [G]): 5 mg, 10 mg (scored).
- Tablets (Zenzedi): 2.5 mg, 5 mg, 7.5 mg, 10 mg, 15 mg, 20 mg, 30 mg (5 mg scored, 10 mg double scored; rest unscored).
- ER capsules (Dexedrine Spansules, [G]): 5 mg, 10 mg, 15 mg.
- Liquid (Liquadd, ProCentra, [G]): 5 mg/5 mL.

Dosage Guidance:

- ADHD (IR and ER):
 - Adults and children ≥6 years: Start 5 mg QAM, ↑ by 5 mg/day at weekly intervals to max 60 mg/day, though doses ≥40 mg/day are rarely more effective. Divide IR dose QD-TID.
 - Children 3–5 years: Start 2.5 mg QAM, ↑ by 2.5 mg/day weekly to max 60 mg/day, though doses >40 mg/day are rarely more effective. Divide IR dose QD-TID.
- Narcolepsy (IR and ER):
 - Start 10 mg QAM, \uparrow by 10 mg/day weekly to max 60 mg/day. Divide IR dose QD−TID.

Monitoring: ECG if history of cardiac disease.

Cost: IR/ER: \$ (Zenzedi: \$\$; ProCentra: \$\$\$\$)

Side Effects:

- Most common: Abdominal pain, anorexia, nausea, tics, insomnia, tachycardia, headache.
- Serious but rare: See class warnings in chapter introduction.
- Pregnancy/breastfeeding: Limited data in pregnancy; likely safe in breastfeeding.

Mechanism, Pharmacokinetics, and Drug Interactions:

- Stimulant that inhibits reuptake of dopamine and norepinephrine.
- Metabolized primarily through CYP2D6 (minor) and glucuronidation; t ½: 12 hours.
- Avoid use with MAOIs, antacids.

Clinical Pearls:

- Dextroamphetamine is the more potent d-isomer of amphetamine; it has potentially less peripheral effects (eq. motor tics) than a racemic mix (eq. mixed amphetamine salts like Adderall, amphetamine, or methamphetamine).
- IR tablets and oral solution: Doses can be given at intervals of four to six hours.
- Dextroamphetamine is the only stimulant, other than Adderall IR, approved for children <6 years (approved for children ≥3 years).
- The newer Zenzedi brand offers more dosing flexibility options, but it is more expensive than generic IR tablets.
- Also available as D,L racemic mixture of amphetamine as Evekeo tablets, Adzenys XR-ODT, and Dyanavel XR oral suspension (see amphetamine fact sheet).

Fun Fact:

Dexys Midnight Runners, the British band famous for its song "Come On Eileen" (1982), derived their name from Dexedrine—"Dexys" after the drug's name and "Midnight Runners" in reference to the energy it provides.

