Cephalexin-induced bradycardia in a young healthy woman

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CASE

A 32-year-old woman with a history of gastric bypass surgery presented with a 2-day history of nausea, vomiting, light-headedness, and chest tightness, which coincided with starting cephalexin for 4 days for an ingrown nail. Her electrocardiogram showed sinus bradycardia at 40 beats/minute with no evidence of atrioventricular (AV) block (Figure). She was hospitalized under observation, and the cephalexin was stopped. Her laboratory workup, including electrolytes and TSH, and her echocardiogram were unremarkable. Continuous telemetry revealed bradycardia ranging from 40-60 beats/minute with no AV block. Her treadmill stress test suggested chronotropic incompetence. She was asymptomatic during a 48-hour observation period, and she was discharged and scheduled for a follow-up. Two weeks later, she was able to reach 100% of maximum heart rate suggesting chronotropic incompetence reversal following cephalexin stoppage.

Discussion

Macrolides and fluoroquinolones are associated with adverse cardiac effects, such as prolonged QT and *torsades de pointes*.¹ Bradycardia is rarely reported as a side effect of antibiotic therapy. In a phase IV clinical trial analyzing cephalexin side effects, 12,600 patients reported having side effects; 102 patients (0.81%) had bradycardia. Bradycardia was mainly reported in female patients older than 60, who took cephalexin for less than 1 month.² Physicians should have a high index of suspicion for the possible side effects after antibiotic therapy for early detection and management of potentially reversible complications.

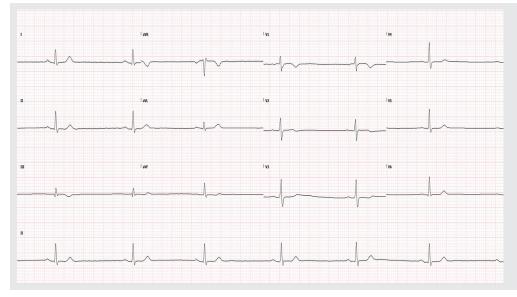


Figure. Sinus bradycardia 40 beats/minute with no evidence of atrioventricular (AV) block.

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