

Another face of Digoxin Toxicity

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A 74-year-old man was referred from private clinic for evaluation of dyspnea and abnormal electrocardiography (ECG) under suspicion of new onset diabetes mellitus (DM). His medical history included benign prostate hyperplasia, paroxysmal atrial fibrillation (PAF), and congestive heart failure (CHF) on medications. His blood pressure was 134/62 mmHg and pulse rate was 75 bpm. He had a relatively healthy looking appearance and physical examination was fine with regular heart beats without murmur. Initial chest X ray showed mild cardiomegaly (CT ratio was 0.60) and ECG (**Panel A**)

showed sinus rhythm with PR interval prolongation and ST-segment and T-wave forces opposite the direction of the major QRS forces (scooped ST segment), suggesting digoxin toxicity. His current medications were warfarin 3mg, digoxin 0.25 mg, furosemide 20 mg once a day. We checked serum digoxin level, glucose, electrolyte, renal function studies and other routine laboratory studies to check digoxin toxicity and DM. Serum digoxin level was 1.8 ng/mL and fasting serum glucose level was 134 mg/dL. Hemoglobin A1C level was 5.8%.

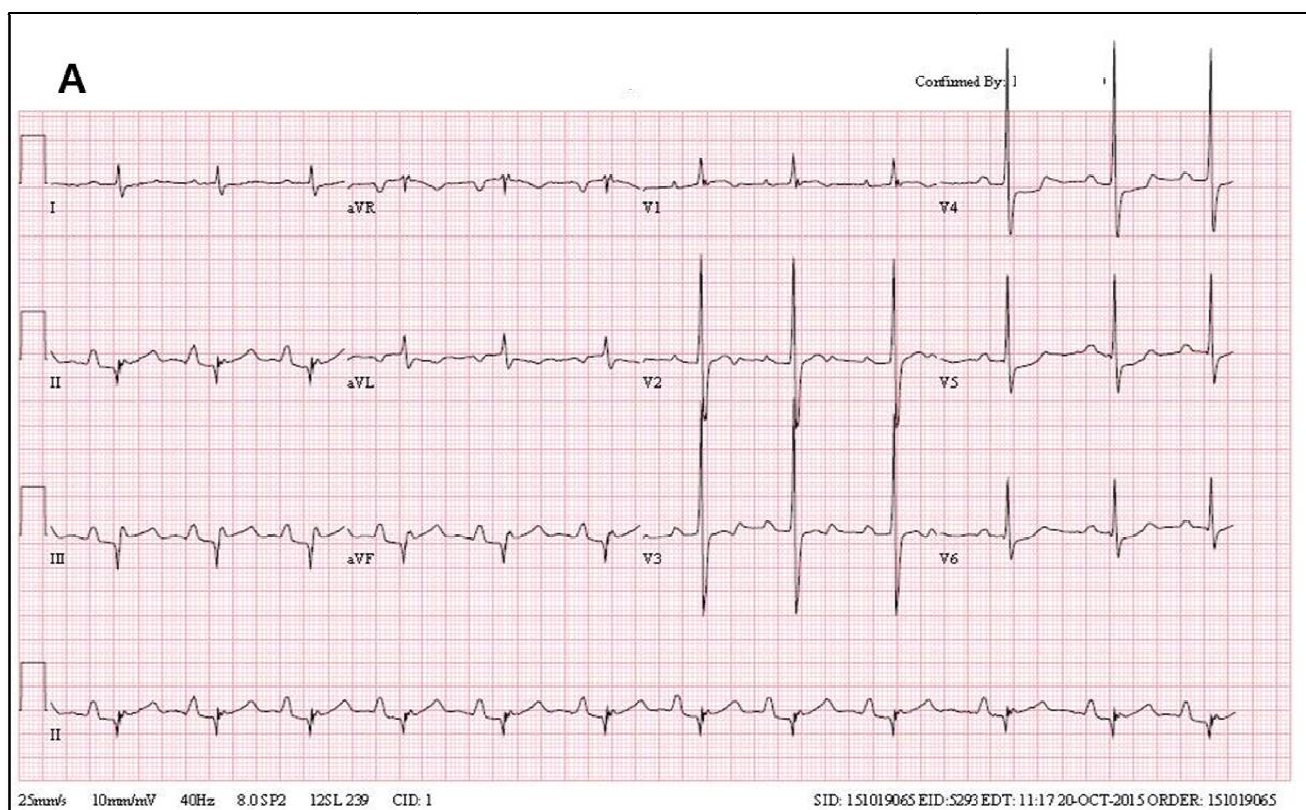


Figure 1. ECG (Panel A)

He had abdominal discomfort and dyspepsia about a month ago, and he drank daily soda twice or three times a

day since he felt dyspepsia. We suspected hyperglycemia caused by soda containing lots of sugar (sprite in his case)

to facilitate digestion for folk remedy. We made him stop taking digoxin and drinking soda and we prescribed beta blocker instead. He recovered completely after one

month, as restoration of T wave abnormality (**Panel B**) and normalized fasting serum glucose level (99 mg/dL).

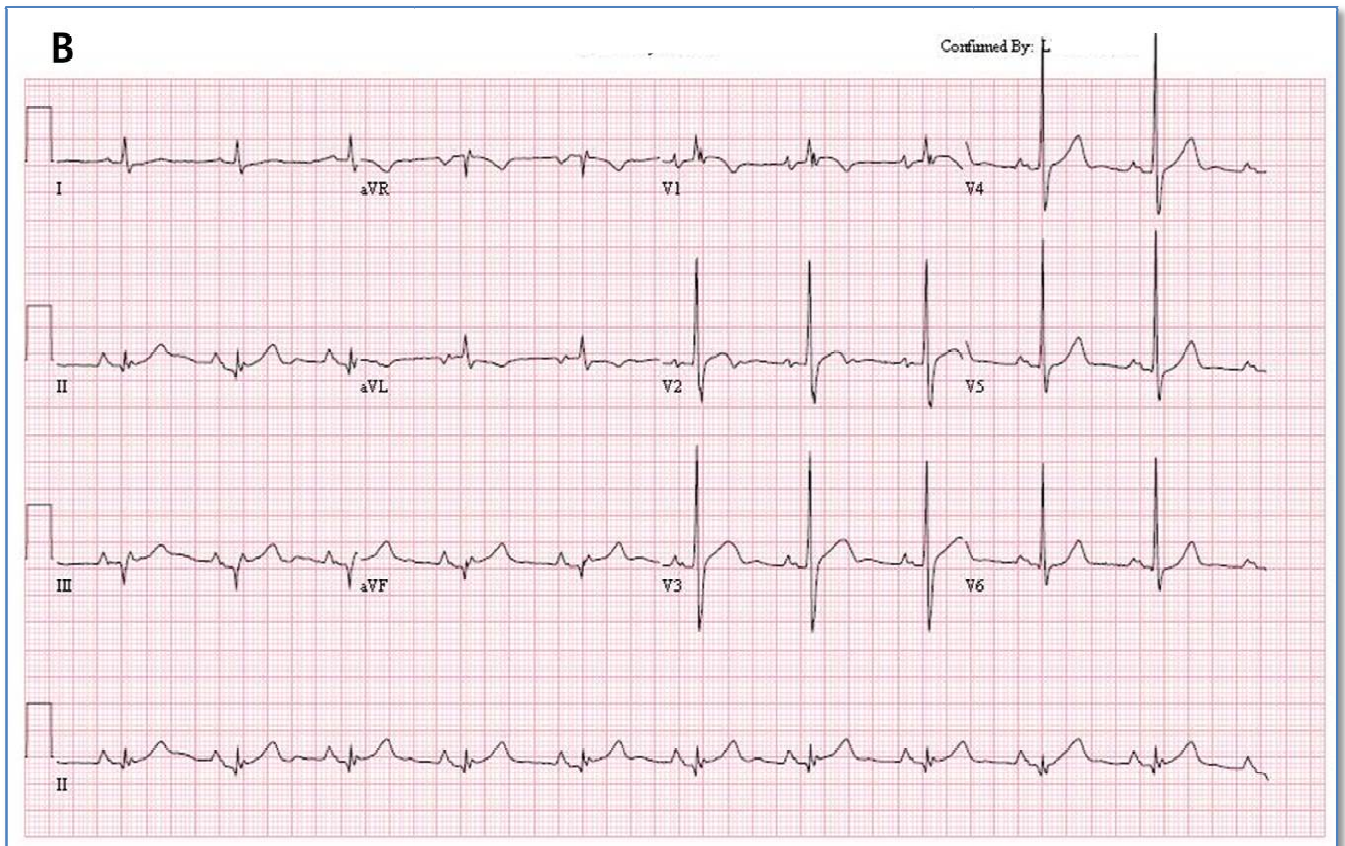


Figure 2. ECG (Panel A)

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