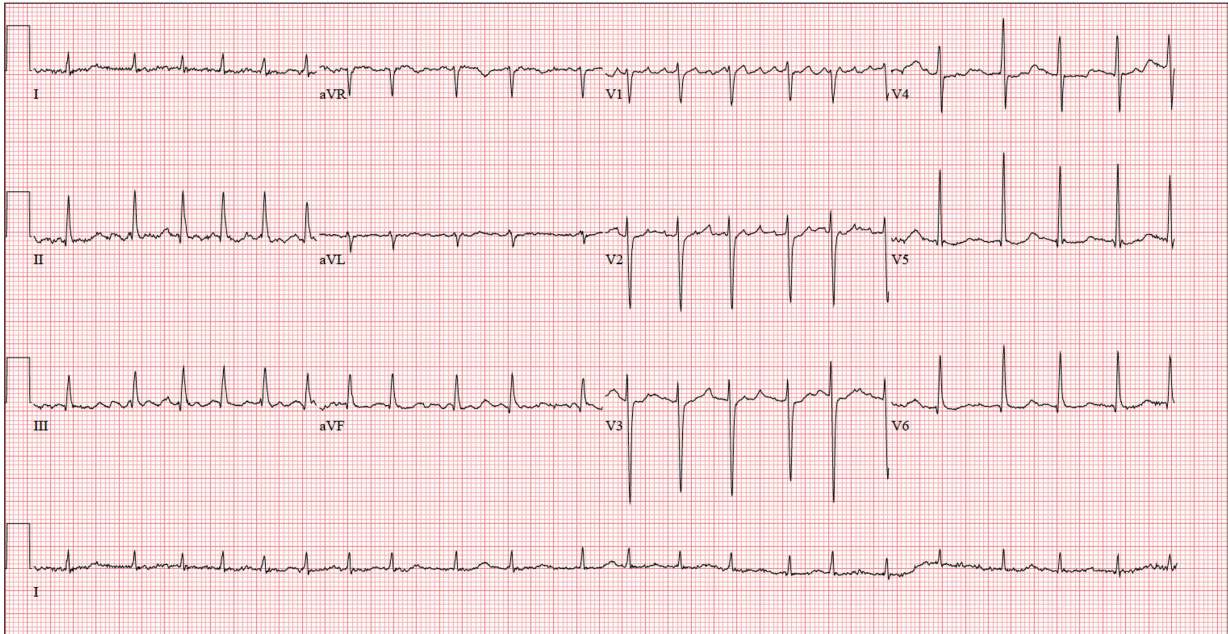


# Man Awakens With “Fluttering” in His Chest



**A** 56-year-old man presents to the emergency department (ED) complaining of shortness of breath and a rapid heart rate. He went to bed at his regular time (10:30 PM) last night and woke up at 3:30 AM with a fluttering sensation in his chest. He checked his pulse; it was 120 beats/min.

Alarmed, he got out of bed and noted he was short of breath as he walked to the bathroom. He went back to bed, but after approximately 20 minutes without

relief, he decided to call his son to take him to the ED. The time from onset of symptoms until arrival at the ED was two hours. During that time, his symptoms did not change.

When you examine the patient, he states that he is typically in excellent health and has never experienced either shortness of breath or a rapid heart rate before. He denies a history of cardiac or pulmonary disease and has never had chest pain, syncope, or near-syncope.

Medical history is unremarkable. Surgical history is remarkable for a tonsillectomy in childhood and an appendectomy for acute appendicitis at age 18. The patient has no known drug allergies and is taking ibuprofen for a recent ankle sprain but is on no other medications. He works as a certified public accountant

and has a sedentary lifestyle. He drinks two to three glasses of wine each evening, does not smoke, and denies recreational or naturopathic medication use. He is a widower (his wife died of breast cancer at age 44) and has one son who lives in the same housing complex.

The review of systems is remarkable for a recent left ankle sprain, which occurred when the patient slipped on the carpet at home. Vital signs include a blood pressure of 144/84 mm Hg; pulse, 130 beats/min; respiratory rate, 18 breaths/min<sup>-1</sup>; O<sub>2</sub> saturation, 98%; and temperature, 98.9°F. His height is 5 ft 9 in and his weight, 223 lb.

The physical exam reveals an obese white male in mild distress. The HEENT exam reveals corrective lenses and the absence of tonsils. The neck shows no evidence



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### ANSWER

The radiograph shows multiple stacked dilated loops of small bowel. The colon does not appear distended. (A nasogastric tube is also present, and there are degenerative changes in the spine.) Such a finding is typically associated with at least a partial small bowel obstruction, since no definite air fluid levels are noted.

The patient was admitted and made *npo*. Nasogastric decompression was started, and general surgery consultation was obtained. **CR**



## ECGCHALLENGE

of thyromegaly or jugular venous distention. The lungs are clear in all fields. The cardiac rhythm is irregular with a rate of 130 beats/min. There are no murmurs or extra heart sounds audible.

The abdomen is obese and nontender, with no palpable masses. An old surgical scar is evident in the right lower quadrant, consistent with his history of an appendectomy. The lower extremities show no evidence of peripheral edema. Mild discomfort is present with examination of the left ankle. Peripheral pulses are

strong and equal, and the neurologic exam is intact.

An ECG is obtained that reveals a ventricular rate of 131 beats/min; PR interval, not measured; QRS duration, 82 ms; QT/QTc interval, 374/552 ms; no P axis; R axis, 68°; and T axis, 36°. What is your interpretation of this ECG?

### ANSWER

This ECG is consistent with coarse atrial fibrillation with a rapid ventricular response and a nonspecific T-wave abnormality. The patient's presentation is strongly

suggestive of lone atrial fibrillation: This was the first incidence, it occurred in the absence of an existing heart condition, and it presented with an abrupt onset of increased heart rate and dyspnea.

Lone atrial fibrillation most commonly occurs in men in their 40s and 50s. It is vagally mediated, occurring during sleep or relaxation and after food and/or alcohol consumption.

The patient was cardioverted to normal sinus rhythm in the ED without difficulty, and follow-up was arranged. **CR**