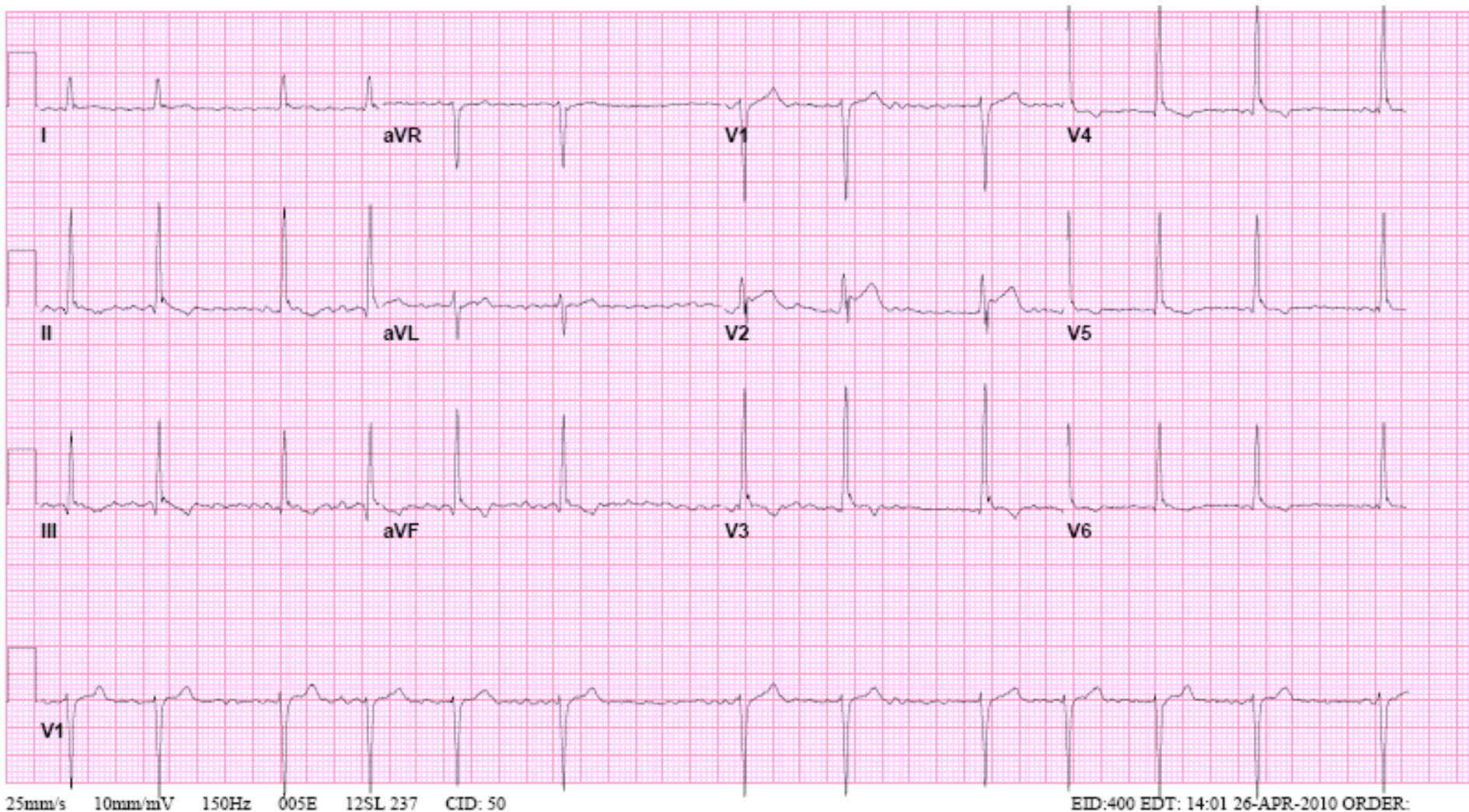


An 18 year old previously healthy male presents to the ER with palpitations for the past 3-4 days. His ECG is shown above.

1) What is the diagnosis?

2) What should you do next for this patient? ("Call cardiology" doesn't count!)



1) Atrial fibrillation. Note the "undulating" baseline and irregularly irregular rhythm that are the classic findings for this ECG abnormality.

2) Since this is presumably the first time this has happened for this teenager, you need to be wary of the main complication of a-fib that we worry about: atrial thrombus formation with subsequent embolization. He needs to have a transesophageal echocardiogram to rule out intracardiac (especially intra-atrial) thrombus, which tends to occur in the left atrial appendage that is usually difficult to visualize on transthoracic echo. If there is no evidence of thrombus, he should be cardioverted with 0.5J/kg synchronized shock, etc, as outlined in PALS and other places.