Clinical Setting: 74 y F with HTN, HLD, DMII, COPD who presents with chest pain.

HR - 145
BP - 110/65
RR - 18
SpO2 - 93% RA
Temp - 98.8 F

This is a case of **Atrial fibrillation/RVR with a subtle STEMI.**

This is a tough EKG. The wide-complex atrial fibrillation jumps out at first. It is definitely irregular, so I am not worried about a ventricular tachycardia. I would love to see an old EKG to make sure there is a pre-existing bundle branch - this looks like a probable right bundle branch block. It is always possible to have a rate-related block, so if the old EKG doesn't show a bundle branch block, I'm not too worried.

The immediate response to this EKG is to try to control the rate. HOWEVER on closer scrutiny - there are some concerning findings. There is ST elevation in V2/V3, and subtle ST depression in inferior leads. The ST depression is harder to tease out due to the bundle branch block, but it's there.

My game plan if I saw this EKG would be to try to to control the rate a bit with a push of metoprolol or diltiazem, get a troponin, repeat an EKG in 20-30 minutes, and try to do a TTE to evaluate for RWMA's. If you wanted to engage cardiology or interventional cardiology based on the first EKG, that's reasonable as well.

The 2nd EKG provided is a little more clear. The cath was slightly delayed in this case, due to the subtle EKG findings, but showed a proximal LAD occlusion.