Clinical Setting: 50 y M with CAD s/p CABG, COPD, cirrhosis who presents from his primary care doctor with an abnormal EKG, palpitations.

HR - 160 BP - 125/66 RR - 20 SpO2 - 93% on RA Temp - 97.8 F

## This is a case of Ventricular Tachycardia

This EKG shows a regular wide complex tachycardia. With this, the differential for the rhythm is already pretty narrow - VTach vs SVT(or aflutter) with aberrancy, or sinus tachycardia with aberrancy. I don't see p-waves hidden anywhere, so ST or Aflutter are less likely. There are a ton of rules you can follow when differentiating VT and SVT with aberrancy - however, in the ED, its always safest to assume VT when in doubt, and treat as such.

Some easy things to remember that point to VT - age (older is more likely VT - even older than just 35!), prior ischemic history, very wide QRS (over 160 ms - which this one is over 180 ms), fusion or capture beats, AV dissociation (this is, if you see p waves in various locations throughout the rhythm strip, not coordinating with QRS complexes). See <u>this LITFL post</u> for more in depth look at VT vs SVT.

So with just this patient's history,, VT is overwhelmingly more likely. Add in the initial EKG with very-wide QRS complexes, and a previous EKG with a narrow QRS, and its almost definite. This case was taken from Dr. Smith's blog - see the post below. He had a 2nd EKG performed (see below) with multiple capture beats as well. He received procainamide with resolution of his VT.

## http://hqmeded-ecg.blogspot.com/2022/04/an-asymptomatic-man-in-his-50s-with.html

