

LAD or LCx?

Discussion

Jerry W. Jones, MD FACEP FAAEM

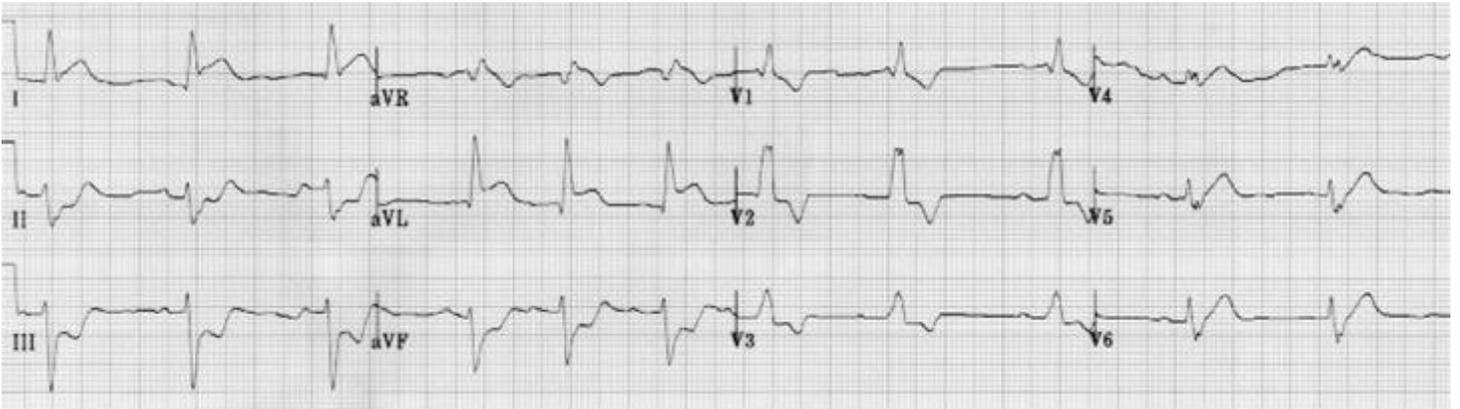


Figure 1

Where is the occlusion located?

The occlusion is located in the left anterior descending (LAD) artery. While both the LAD and the LCx can produce ST elevation in Leads I and aVL as well as hyperacute T waves in Leads V5 and V6, only an occlusion of the LAD PROXIMAL to the first septal perforator (S1) will produce a complete right bundle branch block (cRBBB) and, in this case, an anterior fascicular block.

The LCx does not reach V1 or V2 without an anomalous arterial anatomy. S1 is typically the main blood supply to the right bundle branch and anterior fascicle.

ST depression > 1.0 mm in the inferior leads is said to be classic for an occlusion of the LAD PROXIMAL to S1 – but obviously one must be sure that it is indeed an occlusion of the LAD that is present.