

12 Lead Contiguous Leads - Anterior Wall MI

On the 12 contiguous leads of an ECG, an anterior wall myocardial infarction can affect multiple leads. It shows maximal ST-segment elevation at the anterior leads, V3 and V4. Anterior wall myocardial infarctions result from occlusion of the left anterior descending artery (LAD), which is also known as the "widow maker."







Leads Elevated

Lead V3

V (3) Tree

Lead V3 is an anterior lead, and shows pathologic Q waves and ST-segment changes with anterior wall infarcts.

Lead V4

V (4) Fork

V4 is an anterior lead, which shows pathologic Q waves and ST-segment elevation in cases of anterior wall MI.

Artery Affected

Left Anterior Descending (LAD)

LED on LAD

The left anterior descending artery (LAD), or the widow maker, provides descending blood supply to large areas of the heart. This means that if these arteries get abruptly and completely occluded it will cause a massive heart attack that will likely lead to a sudden death.