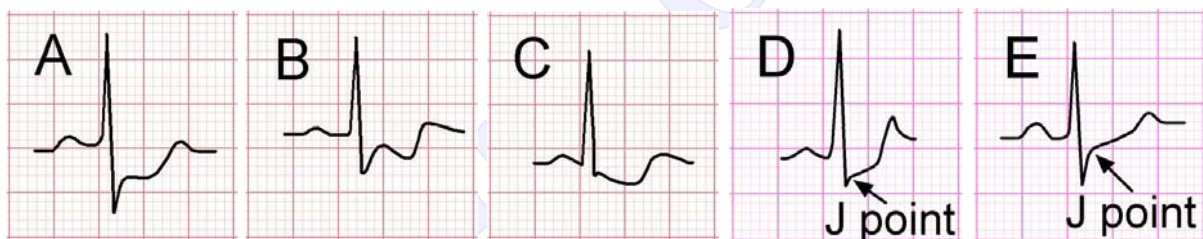


The ECG sign of subendocardial ischemia is ST segment depression (A). Depression is reversible if ischemia is only transient but depression persists if ischemia is severe enough to produce infarction. T wave inversion with or without ST segment depression (B) is sometimes seen but not ST segment elevation or Q wave. That is why subendocardial infarction is also called non-ST-elevation myocardial infarction (NSTEMI) and less commonly non-Q wave myocardial infarction.



ST segment depression seen in subendocardial ischemia or infarction can take on different patterns: The most typical being horizontal or down-sloping depression. Up-sloping ST depression is less specific. In exercise stress tests, horizontal or down-sloping depression of 1 mm or more (A, B, & C) or up-sloping depression of the same magnitude 80 ms beyond the J point (D) is considered positive signs of ischemia. Up-sloping depression of less than 1 mm at 80 ms beyond the J point (E) is simply J point depression and not ST segment depression.



In transmural MI, ischemia in the subendocardium spreads to the epicardium and involves full thickness of the myocardium. In the



acute phase, the ECG signs are ST segment elevation. The elevated ST segment may slope upward or be horizontal or dome-shape.