

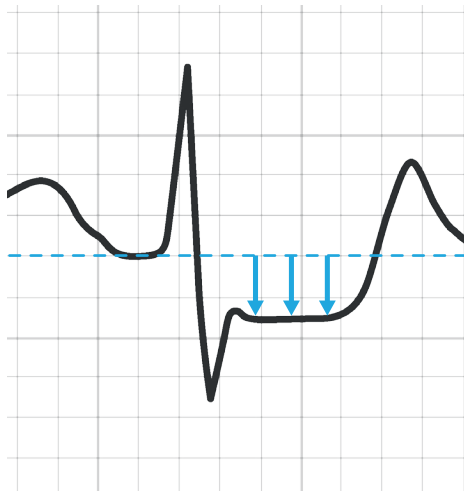
Interpreting stress ECGs

IDENTIFYING A POSITIVE TEST

A change in the ST segment is our key to determining if the test is “negative” or “positive” for myocardial ischemia. Greater than, or equal to 1 mm (0.1 mV) of horizontal or downsloping ST change is the usual criterion for a positive test.

Horizontal ST segment depression

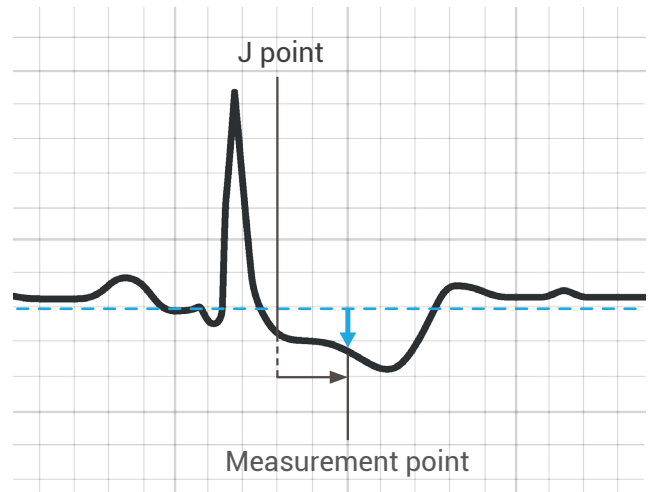
If we measure from the top of the line representing the baseline (PR segment) to the top of the line representing the ST segment we can see that the ST segment is depressed > 1 mm, so this is a “positive” test. Since the ST depression is flat we call this “horizontal” ST depression and it is not critical where we measure it on the ST segment because we will get the same result.



Horizontal ST segment depression

Downsloping ST segment depression

Since the level of the ST segment changes over time, where we measure the magnitude of the depression is important. A common approach is to measure the ST change 80 ms (two little boxes) after the end of the QRS complex. The arrow marks our measurement point. If the ST segment is depressed > 1 mm at our measurement point then this would be a “positive” test.



Downsloping ST segment depression