

Electrocardiogram and T-wave Changes

The heart has a “specialized conductive system” consisting of nerves and cells that allow quick and consistent passage of electrical impulses. The electrocardiogram (ECG) is a medical test used to measure the heart’s electrical impulses, helping to discover problems in this system or possible underlying heart disease. The major components of the heart’s electrical cycle are the P-wave, QRS complex, and the T-wave. Abnormalities of the ST segment may consist of either abnormal straightening, depression, or elevation. ST segment changes can be caused by serious impairments such as hypertension or coronary artery disease. However, changes may also be related to medications (especially digitalis—a common drug used for treatment of atrial fibrillation) or abnormalities of the body’s potassium content. When ST segment changes are further evaluated with a treadmill, thallium scan, arteriogram, exercise echocardiogram, or other similar cardiac test, no rating may be possible if these tests are normal. T-wave changes are one of the most common abnormalities noted on an ECG. Changes in the T-wave may be a normal variant in some healthy individuals, or related to age, body configuration, or position, medications, anemia, pericarditis, and a host of other conditions. T-wave abnormalities may also be caused by virtually any type of cardiovascular disorder such as coronary artery disease, valve impairments, and hypertensive cardiovascular disease. A serious underlying cardiac impairment is much more likely if the T-waves are deeply inverted rather than simply flattened. T-wave abnormalities are classified by their degree of abnormality. T-wave changes are either considered to be minor or major changes. Ratings will depend upon this classification and the presence or absence of other risk factors.

If your client is known to have ST or T wave changes on his or her electrocardiogram (ECG), please answer the following:

1. How long has this abnormality been present? _____ (years)

2. Has there been any recent change in the ECG (last 12 months)?

If yes, please give details

3. Please check if your client has had any of the following:

a) chest pain ___ coronary artery disease ___ or other cardiovascular impairment (give details) _____

b) Diabetes Yes or No

c) Elevated cholesterol Yes or No

d) High blood pressure Yes or No

4. Has your client smoked cigarettes or other form of tobacco in the last 5 years? If yes please give details _____

5. Have any other studies been completed?

a) Exercise treadmill or thallium No or Yes – normal _____ or abnormal _____

b) Echocardiogram No or Yes – normal _____ or abnormal _____

6. Is your client on any medications?

If yes, please give details

7. Does your client have any other major health problems (ex: cancer, etc.)?

If yes, please give details
