

Chapter 1 : ECG Workout: Exercises in Arrhythmia Interpretation 7th Edition - Medicine4u

ECG Lessons - Introduction. The focus of this introductory ECG course is to provide a tutorial about the main features of ECGs along with a method for analyzing ECGs. This method includes assessment of rhythm, calculating heart rate, observing P-wave forms, measurement of intervals and segments and the evaluation of other relevant waves.

Electrodes are placed on the skin of your arms, legs and across chest to measure electrical activity of the heart. It gives information about heart rate, evidence of old heart attacks, thickening of heart muscle, or heartbeat problems such as extra ectopic beats or atrial fibrillation. Exercise increases the workload of the heart resulting in an increased heart rate and increased blood flow to the heart muscle. ECG changes with exercise may suggest narrowings or blockages in coronary arteries supplying the heart muscle. It is also useful for assessing certain levels of fitness. You can stop the test at any time. The ETT is performed by a trained technician and supervised by a doctor. Echocardiography Echo at Cardiology Specialists uses ultrasound to measure function of heart chambers and heart valves. Echo is also called Cardiac Ultrasound, which uses high frequency sound waves and is similar to a gall bladder or pregnancy ultrasound but is instead focused on the heart. Professor Hamid Ikram pioneered the introduction of Echo to Canterbury. At Cardiology Specialists, Echo is performed by a specially trained technician who moves a plastic transducer on the skin of the chest wall to obtain pictures of the heart chambers and valves. Echo cardiac ultrasound is useful for diagnosing weakened heart muscle, old heart attacks, heart valve narrowing or leaking, thickening of heart muscle, holes between heart chambers, or fluid in the sack around the heart. Electrodes are applied to your chest under your clothes by trained staff to measure continuous measurement of heart rate and rhythm over 24 hours. The electrodes are attached to a small portable recorder. You can mark the recording at any time you have heart flutters or other symptoms. It is important to keep a diary so your symptoms can be compared to your heart rhythm at same time. The 24 hour Holter Monitor at Cardiology Specialists is useful to detect different types of palpitations including: Patients with intermittent atrial fibrillation are at similar risk for stroke compared to patients in atrial fibrillation all the time. Blood Pressure recordings can be compared to different patient activities using an iPhone app, or diary. Recent studies have shown that patients with white coat hypertension have a higher incidence of vascular events including strokes and heart attacks. Spirometry This is where you blow into a machine to measure lung function. This can be compared after inhalation of a bronchodilator to detect asthma, smoking-related lung disease, or work-related lung disease.

Chapter 2 : ECG Tracings | Practice Strips

Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.

Sometimes EKG abnormalities can be seen only during exercise or while symptoms are present. This test is sometimes called a "stress test" or a "treadmill test. The heart is a muscular pump made up of four chambers. The two upper chambers are called atria, and the two lower chambers are called ventricles. A natural electrical system causes the heart muscle to contract and pump blood through the heart to the lungs and the rest of the body. The spikes and dips in the line tracings are called waves. Why It Is Done An exercise electrocardiogram is done to: Help find the cause of unexplained chest pain or pressure. Help decide on the best treatment for a person with angina. See how well people who have had a heart attack or heart surgery are able to tolerate exercise. Help find the cause of symptoms that occur during exercise or activity, such as dizziness, fainting, or rapid, irregular heartbeats palpitations. Check for a blockage or narrowing of an artery after a medical procedure, such as angioplasty or coronary artery bypass surgery, especially if the person has chest pain or other symptoms. See how well medicine or other treatment for angina or an irregular heartbeat is working. Help you make decisions about starting an exercise program if you have been inactive for a number of years and have an increased chance of having heart disease. Are taking any medicines, including a medicine for an erection problem such as Viagra. You may need to take nitroglycerin during this test, which can cause a serious reaction if you have taken a medicine for an erection problem within the previous 48 hours. Ask your doctor whether you need to stop taking any of your other medicines before the test. Are allergic to any medicines, such as those used to numb the skin anesthetics. Take a blood thinner , or if you have had bleeding problems. Have joint problems in your hips or legs that may make it hard for you to exercise. Are or might be pregnant. Talk to your doctor about any concerns you have regarding the need for the test, its risks, how it will be done, or what the results will mean. To help you understand the importance of this test, fill out the medical test information form What is a PDF document? Your doctor may recommend how you should eat before the test. For example, your doctor may suggest you only eat a light breakfast before your test. An exercise EKG may be dangerous and should not be done in some situations. Be sure to tell your doctor if you: Think you are having a heart attack. Are having angina that is not relieved with rest unstable angina. Have high blood pressure that is not controlled with medicine. Have untreated, life-threatening irregular heart rhythms arrhythmias. Have severe narrowing of one of your heart valves aortic valve stenosis. Have inflammation in your heart muscle myocarditis. Have a severe decrease in the amount of red blood cells anemia. Have a stretched and bulging section in the wall of the large artery that carries blood from the heart aortic aneurysm or in one of the chambers of the heart ventricular aneurysm. Have severe lung disease. Remove all jewelry from your neck, arms, and wrists. Wear flat, comfortable shoes no bedroom slippers and loose, lightweight shorts or sweat pants. Men are usually bare-chested during the test. Women often wear a bra, T-shirt, or hospital gown. Avoid wearing any restrictive clothing other than a bra. You may want to stretch your arm and leg muscles before beginning an exercise EKG. The test results are evaluated by an internist , family medicine doctor , or cardiologist. Before the test Areas on your arms, legs, and chest where small pads or patches electrodes will be placed are cleaned and may be shaved to provide a clean, smooth surface to attach the electrodes. The electrodes are hooked to a machine that traces your heart activity onto a piece of paper. Your chest may be loosely wrapped with an elastic band to keep the electrodes from falling off during exercise. A blood pressure cuff will be wrapped around your upper arm so that your blood pressure can be checked every few minutes during the test. During the test For exercise, you typically either walk on a treadmill or pedal on a stationary bicycle while being monitored by an EKG machine. Your EKG will be monitored on screen, and paper copies will be printed out for later review before you start the exercise, at the end of each section of exercise, and while you are recovering. The test is usually performed in a series of stages, each lasting 3 minutes. After each 3-minute stage, the resistance or speed of the treadmill or bicycle is increased. For the treadmill test, the

treadmill will move slowly in a level or slightly inclined position. As the test progresses, the speed and steepness of the treadmill will be increased so that you will be walking faster and at a greater incline. For the stationary bicycle, you will sit on the bicycle with the seat and handlebars adjusted so that you can pedal comfortably. You can use the handlebars to help you balance, but you should not use them to support your weight. You will be asked to pedal fast enough to maintain a certain speed. The resistance will then be gradually increased, making it harder to pedal. In both the treadmill and the bicycle tests, your EKG, heart rate, and blood pressure will be recorded during the exercise. Your heart rate and EKG will be recorded continuously. Your blood pressure is usually measured during the second minute of each stage. It may be measured more frequently if the readings are too high or too low. During the test, you might be asked to give a number that answers the question "How hard do you feel the exercise is?" The test continues until you need to stop, until you reach your maximum heart rate, until you begin to show symptoms of stress on your heart and lungs such as fatigue, extreme shortness of breath, or angina, or until the EKG tracing shows decreased blood flow to your heart muscle. The test may also be stopped if you develop serious irregular heartbeats or if your blood pressure drops below your resting level. After the test

When the exercise phase is completed: You will be able to sit or lie down and rest. Your EKG and blood pressure will be checked for about 5 to 10 minutes during this time. The electrodes are then removed from your chest, and you may resume your normal activities. Do not take a hot bath or shower for at least an hour, since hot water after vigorous exercise can make you feel dizzy and faint. The entire test usually takes 15 to 30 minutes.

How It Feels The electrodes may feel cool when they are put on your chest. If you have a lot of hair on your chest, a small area under each electrode may need to be shaved. When the electrodes are taken off, they may pull your skin a little. The room where the exercise electrocardiogram is done may be kept cool for comfort, since you will warm up rapidly when you begin to exercise. The blood pressure cuff on your arm will be inflated every few minutes. This will squeeze your arm and feel tight. Tell your health professional if this is painful. While exercising, you may have leg cramps or soreness; feel tired, short of breath, or lightheaded; have a dry mouth; and sweat. You might even have some mild chest pain or pressure. Tell the health professional or doctor if you have these symptoms.

Risks An exercise electrocardiogram is generally safe. Emergency equipment will be available in the testing area. Irregular heartbeats during the test. The electrodes are used to transfer an image of the electrical activity of your heart to tracing on paper. No electricity passes through your body from the machine, and there is no danger of getting an electrical shock. Your doctor may be able to talk to you about your results right after the test. But complete test results may take several days. Your doctor will look at the pattern of spikes and dips on your electrocardiogram to check the electrical activity in different parts of your heart. The spikes and dips are grouped into different sections that show how your heart is working. You reach your target heart rate based on your age and can exercise without chest pain or other symptoms of heart disease. Your blood pressure increases steadily during exercise. Your EKG tracings do not show any significant changes. Your heartbeats look normal. You have angina symptoms, such as chest pain or pressure, during or right after the test. You have other symptoms of heart disease, such as dizziness, fainting, or extreme shortness of breath. Your blood pressure drops or does not rise during exercise. The EKG tracing does not look normal. Your heartbeats are too fast, too slow, or very irregular. Some people who have a normal exercise electrocardiogram test may still have heart disease, and some people with an abnormal test do not have heart disease.

Chapter 3 : ECG Interpretation | Practice Drills

This bar-code number lets you verify that you're getting exactly the right version or edition of a book. The digit and digit formats both work.

How do I prepare for an exercise electrocardiogram? Be sure to tell your healthcare provider if you have the following: Aneurysm Unstable angina uncontrolled chest pain Severe heart valve disease malfunction of one or more of the heart valves Severe heart failure Recent heart attack myocardial infarction or MI Severe high blood pressure Pericarditis an inflammation or infection of the sac that surrounds the heart Severe anemia low red blood cell count A pacemaker Your healthcare provider or the technician will explain the test to you and let you ask questions. You will be asked to sign a consent form that gives your permission to do the test. Read the form carefully and ask questions if anything is not clear. You will be asked to fast not eat or drink for a few hours before the test. Tell your healthcare provider if you are pregnant or think you could be. Tell your healthcare provider of all medicines prescription and over-the-counter , vitamins, herbs, and supplements that you are taking. You may be asked to hold certain medicines before the test, such as beta-blockers. Your healthcare provider will provide specific instruction. Wear comfortable walking shoes and loose-fitting pants or shorts. Women should wear a short-sleeved top that fastens in the front to make it easier to attach the ECG electrodes to the chest. If you use an inhaler for asthma or other breathing problems, bring it to the test. Based on your medical condition, your healthcare provider may request other specific preparation. What happens during an exercise electrocardiogram? An exercise electrocardiogram ECG may be done on an outpatient basis or as part of your hospital stay. Tests may vary depending on your condition and your healthcare providers practice. Generally, an exercise ECG follows this process: You will be asked to remove any jewelry or other objects that may interfere with the test. You will be asked to open your blouse or shirt in the front men may be asked to remove their shirts. The technician will ensure your privacy by covering you with a sheet or gown and exposing only the necessary skin. If your chest is very hairy, the technician may shave or clip small patches of hair, as needed, so that the electrodes will stick closely to your skin. Electrodes will be attached to your chest and abdomen belly. The wires will be attached to the electrodes. A blood pressure cuff will be put on your arm while you are sitting down. An initial, or baseline, ECG and blood pressure readings will be taken while you are sitting down and standing up. You will be instructed on how to walk on the treadmill or use the bike. You will be told to let your healthcare provider know if you start to have any chest pain, dizziness, lightheadedness, extreme shortness of breath, nausea, headache, leg pains, or any other symptoms during exercise. You will start to exercise at a minimal level. The intensity of the exercise will be slowly increased. ECG and blood pressure readings will be taken periodically to measure how well your heart and body are responding to the exercise. The length of time you will exercise is based on a target heart rate determined by the healthcare provider based on your age and physical condition and your own exercise tolerance. Exercise duration is an important part of the stress test result. The test may be stopped if you develop severe symptoms, such as chest pain, dizziness, nausea, severe shortness of breath, severe tiredness, or elevated blood pressure. Once you have completed the exercise part of the test, the rate of exercise will be slowed for a "cool down" to help avoid any nausea or cramping from suddenly stopping. You will sit in a chair and your ECG and blood pressure will be monitored until they return to normal or near-normal. This may take 10 to 20 minutes. You may then get dressed. What happens after an exercise electrocardiogram? You should be able to go back to your normal diet and activities, unless your healthcare provider tells you differently. Generally, there is no special care needed after an exercise ECG. You may feel tired for several hours or longer after the test, particularly if you do not normally exercise. Otherwise, you should feel normal within a few hours after the exercise ECG. If you feel tired for more than a day, contact your healthcare provider. Tell your healthcare provider if you develop any signs or symptoms such as, chest pain, shortness of breath, dizziness, or fainting. Your healthcare provider may give you other instructions after the test, depending on your particular situation. Next steps Before you agree to the test or the procedure make sure you know:

Chapter 4 : Exercise Electrocardiogram

Cardiac stress test ECG Tracings (Dreamstime/TNS) Posted: a.m. Saturday, March 24, Dear Mayo Clinic: I have a treadmill stress test scheduled to look for heart disease.

Immediate access to this article To see the full article, log in or purchase access. He served as a visiting clinical fellow at Columbia College of Physicians and Surgeons, New York City, and completed a faculty development fellowship in family medicine at the University of North Carolina at Chapel Hill Address correspondence to Mark D. The American College of Cardiology and American Heart Association guidelines for exercise stress testing are available on the Internet at this address: National Center of Health Statistics. Health, United States, Superintendent of Documents, U. Cardiovascular disease in women. Cardiovascular health and disease in women. Exercise stress testing for the family physician: Evaluating coronary artery disease noninvasively—“which test for whom? Cardiac evaluation and diagnostic testing. J Am Coll Cardiol. Emerging technology in stress echocardiography. Clinical competence in exercise testing. Myers J, Froelicher VF. Angiographic progression of coronary artery disease and the development of myocardial infarction. Diagnosis of chest pain. Pluses and minuses of stress tests. Exercise-induced ST depression in the diagnosis of coronary artery disease: Exercise stress testing for the family physician [Syllabus]. Stable ischemic heart disease. Using stress and imaging procedures to direct therapy. Exercise treadmill score for predicting prognosis in coronary artery disease. American College of Sports Medicine. Noninvasive imaging in acute coronary disease. Williams and Wilkins, Interpretation of the results. Dubach P, Froelicher VF. Recent advances in exercise testing. Diagnostic and functional exercise testing: Guest editor of the series is Ralph C.

Chapter 5 : The Basis of ECG Diagnosis

Auto Suggestions are available once you type at least 3 letters. Use up arrow (for mozilla firefox browser alt+up arrow) and down arrow (for mozilla firefox browser alt+down arrow) to review and enter to select.

Sometimes EKG abnormalities can be seen only during exercise or while symptoms are present. This test is sometimes called a "stress test" or a "treadmill test. The heart is a muscular pump made up of four chambers. The two upper chambers are called atria, and the two lower chambers are called ventricles. A natural electrical system causes the heart muscle to contract and pump blood through the heart to the lungs and the rest of the body. The spikes and dips in the line tracings are called waves. Why It Is Done An exercise electrocardiogram is done to: Help find the cause of unexplained chest pain or pressure. Help decide on the best treatment for a person with angina. See how well people who have had a heart attack or heart surgery are able to tolerate exercise. Help find the cause of symptoms that occur during exercise or activity, such as dizziness, fainting, or rapid, irregular heartbeats palpitations. Check for a blockage or narrowing of an artery after a medical procedure, such as angioplasty or coronary artery bypass surgery, especially if the person has chest pain or other symptoms. See how well medicine or other treatment for angina or an irregular heartbeat is working. Help you make decisions about starting an exercise program if you have been inactive for a number of years and have an increased chance of having heart disease. Are taking any medicines, including a medicine for an erection problem such as Viagra. You may need to take nitroglycerin during this test, which can cause a serious reaction if you have taken a medicine for an erection problem within the previous 48 hours. Ask your doctor whether you need to stop taking any of your other medicines before the test. Are allergic to any medicines, such as those used to numb the skin anesthetics. Take a blood thinner , or if you have had bleeding problems. Have joint problems in your hips or legs that may make it hard for you to exercise. Are or might be pregnant. Talk to your doctor about any concerns you have regarding the need for the test, its risks, how it will be done, or what the results will mean. To help you understand the importance of this test, fill out the medical test information form What is a PDF document? Your doctor may recommend how you should eat before the test. For example, your doctor may suggest you only eat a light breakfast before your test. An exercise EKG may be dangerous and should not be done in some situations. Be sure to tell your doctor if you: Think you are having a heart attack. Are having angina that is not relieved with rest unstable angina. Have high blood pressure that is not controlled with medicine. Have untreated, life-threatening irregular heart rhythms arrhythmias. Have severe narrowing of one of your heart valves aortic valve stenosis. Have an infection in your heart muscle myocarditis. Have a severe decrease in the amount of red blood cells anemia. Have a stretched and bulging section in the wall of the large artery that carries blood from the heart aortic aneurysm or in one of the chambers of the heart ventricular aneurysm. Have severe lung disease. Remove all jewelry from your neck, arms, and wrists. Wear flat, comfortable shoes no bedroom slippers and loose, lightweight shorts or sweat pants. Men are usually bare-chested during the test. Women often wear a bra, T-shirt, or hospital gown. Avoid wearing any restrictive clothing other than a bra. You may want to stretch your arm and leg muscles before beginning an exercise EKG. The test results are evaluated by an internist , family medicine doctor , or cardiologist. Before the test Areas on your arms, legs, and chest where small pads or patches electrodes will be placed are cleaned and may be shaved to provide a clean, smooth surface to attach the electrodes. The electrodes are hooked to a machine that traces your heart activity onto a piece of paper. Your chest may be loosely wrapped with an elastic band to keep the electrodes from falling off during exercise. A blood pressure cuff will be wrapped around your upper arm so that your blood pressure can be checked every few minutes during the test. During the test For exercise, you typically either walk on a treadmill or pedal on a stationary bicycle while being monitored by an EKG machine. Your EKG will be monitored on screen, and paper copies will be printed out for later review before you start the exercise, at the end of each section of exercise, and while you are recovering. The test is usually performed in a series of stages, each lasting 3 minutes. After each 3-minute stage, the resistance or speed of the treadmill or bicycle is increased. For the treadmill test, the treadmill will move slowly in a level or slightly inclined position. As the test progresses, the speed and

steepness of the treadmill will be increased so that you will be walking faster and at a greater incline. For the stationary bicycle, you will sit on the bicycle with the seat and handlebars adjusted so that you can pedal comfortably. You can use the handlebars to help you balance, but you should not use them to support your weight. You will be asked to pedal fast enough to maintain a certain speed. The resistance will then be gradually increased, making it harder to pedal. In both the treadmill and the bicycle tests, your EKG, heart rate, and blood pressure will be recorded during the exercise. Your heart rate and EKG will be recorded continuously. Your blood pressure is usually measured during the second minute of each stage. It may be measured more frequently if the readings are too high or too low. During the test, you might be asked to give a number that answers the question "How hard do you feel the exercise is?" The test continues until you need to stop, until you reach your maximum heart rate, until you begin to show symptoms of stress on your heart and lungs such as fatigue, extreme shortness of breath, or angina, or until the EKG tracing shows decreased blood flow to your heart muscle. The test may also be stopped if you develop serious irregular heartbeats or if your blood pressure drops below your resting level. After the test

When the exercise phase is completed: You will be able to sit or lie down and rest. Your EKG and blood pressure will be checked for about 5 to 10 minutes during this time. The electrodes are then removed from your chest, and you may resume your normal activities. Do not take a hot bath or shower for at least an hour, since hot water after vigorous exercise can make you feel dizzy and faint. The entire test usually takes 15 to 30 minutes.

How It Feels The electrodes may feel cool when they are put on your chest. If you have a lot of hair on your chest, a small area under each electrode may need to be shaved. When the electrodes are taken off, they may pull your skin a little. The room where the exercise electrocardiogram is done may be kept cool for comfort, since you will warm up rapidly when you begin to exercise. The blood pressure cuff on your arm will be inflated every few minutes. This will squeeze your arm and feel tight. Tell your health professional if this is painful. While exercising, you may have leg cramps or soreness; feel tired, short of breath, or lightheaded; have a dry mouth; and sweat. You might even have some mild chest pain or pressure. Tell the health professional or doctor if you have these symptoms.

Risks An exercise electrocardiogram is generally safe. Emergency equipment will be available in the testing area. Irregular heartbeats during the test. The electrodes are used to transfer an image of the electrical activity of your heart to tracing on paper. No electricity passes through your body from the machine, and there is no danger of getting an electrical shock. Your doctor may be able to talk to you about your results right after the test. But complete test results may take several days. Your doctor will look at the pattern of spikes and dips on your electrocardiogram to check the electrical activity in different parts of your heart. The spikes and dips are grouped into different sections that show how your heart is working. You reach your target heart rate based on your age and can exercise without chest pain or other symptoms of heart disease. Your blood pressure increases steadily during exercise. Your EKG tracings do not show any significant changes. Your heartbeats look normal. You have angina symptoms, such as chest pain or pressure, during or right after the test. You have other symptoms of heart disease, such as dizziness, fainting, or extreme shortness of breath. Your blood pressure drops or does not rise during exercise. The EKG tracing does not look normal. Your heartbeats are too fast, too slow, or very irregular. Some people who have a normal exercise electrocardiogram test may still have heart disease, and some people with an abnormal test do not have heart disease.

Chapter 6 : Types of Electrocardiogram (EKG/ECG) | Stanford Health Care

examples of ECG tracings. This guide is for reference ONLY. If you find your ECG tracing different from a normal sinus rhythm, or if the tracing resembles any of the irregular ECG tracings, please consult a physician for advices. Proprietary information of DailyCare BioMedical Inc. No reproduction is allowed.

Limitations of the electrocardiogram What is an electrocardiogram? An electrocardiogram ECG records the electrical activity of the heart. The heart produces tiny electrical impulses which spread through the heart muscle to make the heart contract. These impulses can be detected by the ECG machine. Sometimes it is done as part of routine tests - for example, before you have an operation. The ECG test is painless and harmless. The ECG machine records electrical impulses coming from your body - it does not put any electricity into your body. How is it done? Small metal electrodes are stuck on to your arms, legs and chest. Wires from the electrodes are connected to the ECG machine. The machine detects and amplifies the electrical impulses that occur at each heartbeat and records them on to a paper or computer. A few heartbeats are recorded from different sets of electrodes. The test takes about five minutes to do. What does an electrocardiogram show? The electrodes on the different parts of the body detect electrical impulses coming from different directions within the heart. There are normal patterns for each electrode. Various heart disorders produce abnormal patterns. The heart disorders that can be detected include: If the heart rate is very fast, very slow, or irregular. There are various types of irregular heart rhythm with characteristic ECG patterns. A heart attack causes damage to heart muscle and it heals with scar tissue. These can be detected by abnormal ECG patterns. Basically, this causes bigger impulses than normal. **Limitations of the electrocardiogram** An ECG is a simple and valuable test. Sometimes it can definitely diagnose a heart problem. However, a normal ECG does not rule out serious heart disease. Also, not all heart attacks can be detected by ECG. Angina, a common heart disorder , cannot usually be detected by a routine ECG. Specialised ECG recordings sometimes help to overcome some limitations. In this test, a tracing is done when you exercise on a treadmill or exercise bike. This helps to assess the severity of the narrowing of the coronary arteries which causes angina. In this test you wear a small monitor which constantly records your heart rhythm. This test records the electrical activity of your heart when you are walking about ambulatory and doing your normal activities. The electrical activity is usually recorded for hours. Did you find this information useful?

Chapter 7 : Ordering and Understanding the Exercise Stress Test - - American Family Physician

Fully addressing the most common arrhythmias, this clearly worded text will take you step-by-step through expert ECG tracing interpretation methods, including differentiating among rhythm groups, equipment use, and management protocols.

Before the Procedure Patients may be asked to remove all jewelry from the neck and wrists. Prior to having an EKG, patients should avoid putting on skin cream or oil since it tends to interfere with obtaining a good EKG recording. Men are usually bare-chested during the test. Women are offered a gown. If patients are wearing stockings, they should take them off. Patients will lie on a bed or table. Small, sticky patches electrodes are placed on the chest, wrists and ankles. Areas on arms, legs, and chest where the electrodes will be placed are cleaned and may be shaved to provide a good contact with the skin. Patients will be asked to lie quietly while the EKG is recording. Generally, an EKG follows this process: Patients will be asked to remove any jewelry or other objects that may interfere with the procedure Patients will be asked to remove clothing from the waist up. The technician will ensure privacy by covering patient with a sheet or gown and exposing only the necessary skin Patients will lie flat on a table or bed for the procedure. It will take only a short time for the tracing to be completed. Once the tracing is completed, the technician will disconnect the leads and remove the skin electrodes. After the Procedure Patients should be able to resume normal diet and activities, unless the doctor instructs differently. Generally, there is no special care following an EKG. Notify the doctor if any symptoms you had prior to the test occur. These include chest pain, shortness of breath, dizziness, or fainting. But what does it mean? The first short upward notch of the EKG tracing is called the "P wave. The next part of the tracing is a short downward section connected to a tall upward section. This next part is called the "QRS complex. The next short upward segment is called the "ST segment. The next upward curve is called the "T wave. Variations in size and length of the different parts of the tracing may be significant. The tracing for each lead of a lead EKG will look different, but will have the same basic components as described above. Each lead of the lead EKG is "looking" at a specific part of the heart, so variations in a lead may indicate a problem with the part of the heart associated with a particular lead. Before Before the Procedure Patients may be asked to remove all jewelry from the neck and wrists.

Chapter 8 : Electrocardiogram (ECG/EKG) | Heart Health Tests | Patient

Good for you, you found "ECG Quiz". Our philosophy is that the skill and efficiency of electrocardiogram (ECG) interpretation come with practice. We developed this educational module to improve the quality and rapidity of ECG interpretation by physicians, nurses, paramedics, medical and nursing students, among others.

Chapter 9 : Exercise Electrocardiogram | Johns Hopkins Medicine Health Library

The exercise starts at a very easy pace, and is gradually made more strenuous by increasing the speed and incline of the treadmill, or by putting some resistance on the bike wheel. Whilst you exercise, ECG tracings are made and you will also have your blood pressure measured from time to time. The test lasts about minutes.