

## **Holter Monitoring**

### **What Is Holter Monitoring?**

Holter monitoring is a continuous recording of your heart rhythm, usually for 24 hours, while you go about your usual daily activities. It is especially useful in diagnosing abnormal heart rhythms.

### **What Does It Show?**

An abnormal heart rhythm, called an arrhythmia, is a change in either the speed or pattern of the heartbeat. During an arrhythmia, the heart may beat too rapidly, too slowly, or irregularly.

Doctors can diagnose an arrhythmia by obtaining an electrocardiogram (ECG or EKG), a recording of the heart's electrical activity. During a standard ECG test, the heart's electrical impulses are recorded on a strip of moving paper.

Quite often, an arrhythmia will not occur during the brief period (less than a minute) of actual recording at the doctor's office. If your doctor suspects you have an arrhythmia, he or she will want to record the ECG over longer periods of time.

Holter monitoring allows your doctor to record your ECG over a period of 24 hours or longer, while you go about your usual daily activities.

Doctors may order a Holter monitor test to: detect arrhythmias that may not occur during a standard ECG; assess recurrent symptoms such as dizziness, palpitations, or fainting spells; evaluate the efficacy of anti-arrhythmic treatments, such as medications and pacemakers; and help determine whether areas of the heart do not receive enough blood supply.

### **The Holter Recorder**

The recorder is small and portable, and can be worn on a strap over the shoulder or around the waist. Your ECG is recorded continuously, either on tape or on computer-chip memory.

Three to five small, sticky patches, called electrodes or leads, are placed on your chest and connected by wires to the recorder.

Most current Holter recorders are equipped with an event marker. When you sense symptoms (such as palpitations or dizziness), you press a button to note the time of your symptoms. This marks the tape so that your symptoms and ECG recording can be correlated during analysis.

### **How the Test Is Done**

You'll be fitted with the electrodes and recorder by a technician at the doctor's Office. Or test center.

Several areas on your chest will be cleansed with alcohol and an abrasive lotion, to ensure good electrode contact. Men may need to have areas of their chest shaved.

Next, the electrodes are attached to your chest and connected by wires to the recorder. The electrodes and wires are often secured with tape. It is very important that all electrodes remain attached for the entire recording period.

The technician then checks the system to make sure it is working properly. You may also be given written instructions to taking home with you.

### **A Few Practical tips**

- Far the test, wear a loose-fitting blouse. or shirt, with the buttons in front.
- Try to sleep on your back, with the recorder positioned at your side so that the electrodes are not pulled off.
- It's important that all wires and electrodes remain attached for the entire recording. If an electrode comes off or the unit makes a sound, call to see what you should do.
- Do not get the electrodes, wires, or recorder wet. do not swim, take a bath, or shower while wearing the recorder.
- If your recorder is equipped with an event marker, remember to press the button each time you experience symptoms.
- During the test, you should avoid electric blankets, magnets, metal detectors, and high-voltage areas such as power lines. Signals from such devices may affect the recording.

You'll keep the recorder with you at all times for the duration of the test. You can do anything you would normally do, except take a bath or shower.

You will carry a diary in which you will enter your activities, any symptoms you may experience during the recording period, and the time at which your symptoms occurred.

At the end of the recording period, you'll return to the doctor's office or test center to have the recorder and electrodes removed. Or, you'll be instructed on how to remove them yourself.

### **Keeping a Diary**

You'll keep a diary during the period you carry the recorder. The diary is very important-it enables technicians and doctors to correlate your activities and symptoms with the ECG recording.

The information you'll need to enter in the diary includes the following:

- Your activities (walking, climbing stairs, bowel movement, sexual activity, emotional upset, sleeping, taking medications, etc.)
- Symptoms you experience (such as palpitations, dizziness, fainting spell, shortness of breath, or chest discomfort)
- the exact time at which these events occurred.

### **Your Test Results**

Once returned, the tape is played back, scanned by a technician, and analyzed by a computer. The printed report is then reviewed by a doctor. Final results are usually available within a few days.

The information obtained from Holter monitoring helps your doctor make an accurate diagnosis and develop a treatment plan that's best for you.