pacemaker takes over or assists in the heart's conduction function. The implantation of a pacemaker, in the operating room or possibly the catheterization laboratory, is usually a low-risk procedure. The pacemaker is made up of two basic parts, the pulse generator and the lead. The pulse generator is composed of the battery and the electronic circuitry. The lead is an insulated, flexible wire that conducts the electrical impulse from the pulse generator to the heart. Two types of leads are available, transvenous and epicardial. After the lead has been attached to the heart, a small incision is made, and a pocket is formed under the muscle to house and protect the generator. Continuous ECG monitoring is necessary during the recovery phase to assess pacemaker function. The nurse should be aware of the programmed rate and expected individual generator variations. The pacemaker insertion site is monitored for signs of infection. Analgesics are given for pain.

Pacemaker functions have become more sophisticated, and some models can adjust the heart rate to activity demands or be programmed for overdrive pacing or cardioversion.

Discharge teaching includes information about the signs and symptoms of infection, general wound care, and activity restrictions. Parents, and patients if they are old enough, should be taught to take a pulse and know the settings of the pacemaker. If the patient's low rate is set at 80 beats/min and the heart rate is only 68 beats/min, there is a possible problem with the pacemaker that needs to be investigated. Instructions for telephone transmission of ECG readings are also given. Telephone transmission can be used to transmit ECG strips and to monitor battery life and pacemaker function. The pacemaker generator will have to be replaced periodically because of battery depletion. Children with pacemakers should wear a Medic-Alert device, and their parents should have a paper identification card with specific pacer data in case of an emergency. Cardiopulmonary resuscitation (CPR) instruction is suggested for parents.

Tachydysrhythmias

Sinus tachycardia (an abnormally fast heart rate) secondary to fever, anxiety, pain, anemia, dehydration, or any other etiologic factor requiring increased cardiac output should be ruled out before diagnosing an increased heart rate as pathologic. SVT is the most