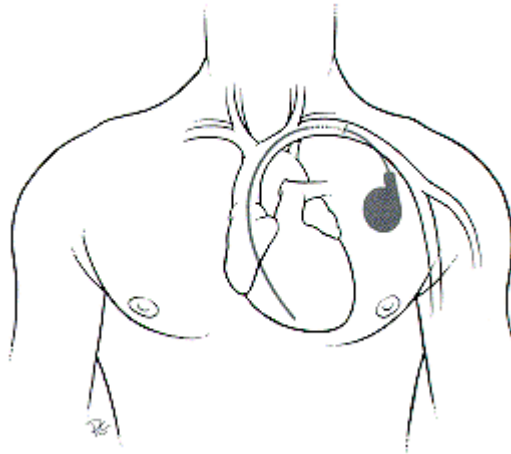


Pacemakers

What Is A Pacemaker?

- A pacemaker is a small electronic device that regulates the heart beat by sending electrical signals to the heart.
- The pacemaker device consists of two parts:
 - The battery unit: a small metal case that contains the power source and regulates how often signals are sent to the heart
 - The wire: carries electrical messages back and forth between the heart and the pacemaker
- The device is much smaller than a deck of cards and weighs a bit more than an ounce.



When Is A Pacemaker Necessary?

- When a problem develops in the heart's electrical tissue, this can cause the heart to beat too slow or too fast.
- When the heart is not beating fast enough to pump an adequate amount of blood to the body, symptoms such as dizziness, fainting spells, blurred vision or shortness of breath can occur.
- A permanent pacemaker is needed when these conditions cannot be controlled by medications.

How Are Pacemakers Placed?

- A permanent pacemaker is inserted in the operating room.
- The patient is sedated during the procedure.
- The pacemaker battery unit is usually placed just under the skin in the upper chest. The pacemaker wire is threaded through a vein into the heart muscle.

WHAT CAN BE EXPECTED AFTER THE PROCEDURE?

- A small dressing will be placed over the incision site and sutures.
- The patient is admitted to a special cardiac care unit for about 24 hours so he can be closely monitored.
- The patient's pulse, blood pressure, and incision site will be checked frequently.

What Precautions Should Be Observed Following The Procedure?

Immediate:

- Inspect the incision daily for signs of infection (redness, drainage, swelling, warmth, pain, or fever), and notify the doctor immediately if any of these signs occur.

Long-term:

- The patient should learn to take his pulse, and call the doctor if his heart rate is much higher or lower than the programmed rate of his pacemaker. This should be done first thing in the morning before getting out of bed.
 - Place the fingers (pads) of one hand lightly on the neck or the wrist (on the thumb side) of the other hand. A beat or pulse will be felt.
 - Count the number of beats for one full minute. This number is equal to the heart rate.
- Notify the doctor if any of the following symptoms occur: difficulty breathing, dizziness or fainting spells, prolonged weakness or fatigue, swelling in the legs, ankles, arms, or wrists, or chest pain.

- The patient should wear an identification bracelet or necklace and carry an identification card that lists the pacemaker's name, manufacturer's model and serial number, date implanted, and the name and telephone number of his doctor.
- Carry a list of all medications.
- The patient will see his doctor two to three times a year.
 - The patient will be required to transmit information from his pacemaker to the doctor:
 - This is done over the phone (transtelephonic monitoring) with special equipment that the patient will be given.
 - This information will keep the doctor informed about how the pacemaker is operating.
 - This will occur once a week at first and then once every few months.
- Even though the pacemaker is permanent, the batteries will need to be replaced periodically.

How Will Having A Pacemaker Affect The Patient's Life?

- The patient may bathe, shower, or swim once the sutures are removed. Water will not harm the pacemaker.
- Elastic bras, belts, and girdles may be worn.
- All electrical equipment or devices may be used such as shavers, blankets, sewing machines, and all kitchen appliances.
 - Microwave ovens may also be used. Metal coverings protect the pacemaker so there is no danger of being too close to one.
 - Avoid MRI (magnetic resonance imaging) scans.
- The patient may ride in or drive a vehicle.
- Sometimes precautions need to be taken prior to medical and/or surgical procedures. The patient must be sure all medical personnel are aware he has a pacemaker before any procedures are performed.