WHAT IS A PACEMAKER?

• A battery-operated electronic device used to treat patients who have symptoms caused by abnormally slow heartbeats and can take over the role of the heart’s own electrical system.
THE HEART

Superior vena cava

Pulmonary artery

Pulmonary veins

Bicuspid valve

Aortic valve

Right atrium

Left atrium

Right ventricle

Left ventricle

Pulmonic valve

Tricuspid valve

Inferior vena cava
TYPES OF PACEMAKER

• **Single-Chamber Pacemakers**

• **Dual-Chamber Pacemakers**

• **Rate-Responsive Pacemakers**
In a single-chamber pacemaker, only one wire (pacing lead) is placed into a chamber of the heart. Sometimes it is the upper chamber, or atrium. Other times it is the lower chamber, or ventricle.
In dual chamber pacemakers, wires are placed in two chambers of the heart. One lead paces the atrium and one paces the ventricle. This approach more closely matches the natural pacing of the heart. This type of pacemaker can coordinate function between the atria and ventricles.
These have sensors that automatically adjust to changes in a person's physical activity.
USES OF PACEMAKER

- Bradycardia
- Atrial fibrillation
- Heart failure
- Syncope
COMPLICATIONS OF PACEMAKER

• bleeding
• Bruising
• infection at the implantation site
• introduction of air into the space between the lung and chest wall
• perforation of the heart
• damage to blood vessels
• Stroke and heart attack
NURSING RESPONSIBILITIES

• Secure consent
• Explain the procedure
• Monitor VS (pre op & post op)
• Sutures are removed between one to two weeks after the procedure
• asked patient not to lift the arm on the side of the pacemaker implantation over the head by 1 – 2 weeks
• asked to avoid heavy lifting, contact sports, and other vigorous exercises for a few weeks.
• Assess for infection
• Teach sterile technique when changing dressing.
• Instruct that dressing is changed every 48hrs.
• Encourage pt to avoid handling of unnecessary contact with surgical site
• Encourage high protein, high calorie diet.
• Be alert to lead dislodgement.
• Secure pacemaker ID card
• Instruct pt that cellular phone should be held on the ear opposite from the side of the pacemaker
• Instruct pt not to carry phone in the pocket near the chest.