PACEMAKERS

- An electronic device that provides repetitive electrical stimulation to the heart muscle to control the heart rate
PACEMAKER

- WIRES- sensing and pacing wires
- BATTERY
INDICATIONS

1. Blocks: AV blocks, usually third degree, bundle branch blocks
2. Symptomatic Bradycardia
3. Arrhythmias during surgery
4. Sick sinus syndrome
PACEMAKERS as to mode of pacing

● SYNCHRONOUS or FIXED
  – The pacemaker delivers electrical stimulus at a FIXED rate regardless of the client’s rhythm and rate
PACEMAKERS as to mode of pacing

● SYNCHRONOUS or DEMAND
  – The pacemaker delivers electrical stimulus **ONLY** when the patient’s own rate falls BELOW the pre-set rate per minute
TYPES OF PACEMAKERS

1. Temporary Pacemaker
   - Used in emergency cases
   - Performed via trans-venous approach
TYPES OF PACEMAKERS

2. Permanent Pacemaker

- Involves implanting the pulse generator under the skin and the wires placed into the right ventricle
PACEMAKER: Nursing Responsibilities

1. Monitor Pacemaker Function
   - Observe the presence of pacemaker “spikes” in the ECG or cardiac monitor
   - Monitor for signs of pacemaker malfunction: Weakness, Fainting, Dizziness and hypotension
PACEMAKER: Nursing Responsibilities

2. Prevent infection
   - Assess vital signs particularly temperature
   - Inspect daily for signs of infection
   - Maintain sterile dressing over the catheter insertion site
PACEMAKER: Nursing Responsibilities

CLIENT Teaching:
- Instruct how to check daily pulse at home
- Inform to report any changes in the heart rate
- Avoid contact sports
- Carry ID
- Instruct to report signs of battery failure
PACEMAKER: Nursing Responsibilities

CLIENT Teaching:
- Dizziness, weakness, swelling of ankle, chest pain and SOB
- Wear loose fitting clothes
- Remind that MOST electrical appliances can be used without any interference to the function of the pacemakers
PACEMAKER: Nursing Responsibilities

CLIENT Teaching:

- AVOID: magnetic resonance imaging, transmitter towers and anti-theft devices
- Move away from electrical appliances if they cause disturbance
- Emphasize regular follow-up