

SUBJECT: CARE OF THE PATIENT WITH A PERMANENT PACEMAKER

Policy No.: C110 Effective Date: 06/00 Page: 1 of 3

Purpose of Policy: To establish a consistent standard for the treatment of a patient with a permanent pacemaker.

Physician's Order Required: No

Performed By: RN, LVN, and Affiliating Nursing Students under the supervision of an RN

Procedural Steps:

- I. <u>Upon admission of a patient with an established pacemaker:</u>
 - A. A copy of the implant record with the pacemaker parameters should be placed in the front of the chart. If this document is not available, request it from the family.
 - B. There are five pacemaker codes:
 - 1. <u>Chamber(s) paced:</u>
 - O none
 - A atrium
 - V ventricular
 - D dual: (atrium and ventricle)
 - S single: (atrium or ventricle)
 - 2. Chamber sensed
 - O none
 - A atrium
 - V ventricular
 - D dual: (atrium and ventricle)
 - S single: (atrium or ventricle)
 - 3. <u>Response to sensing</u>
 - O none
 - T triggered modality pacing (Asynchronous pacing)
 - I inhibits firing
 - D triggers and inhibits at the same time
 - C. Obtain baseline 12 lead EKG as ordered
 - D. Obtain a Cardiology Consult as ordered
 - E. When the patient is not on continuous ECG monitor, take and record pulse rate for a full minute every shift. Report immediately sudden slowing or increasing of the pulse rate or if patient feels lightheaded, faint or there is a variation from their baseline.

II. <u>Permanent Pacemaker After Care Instructions</u>

- A. Perform a comprehensive handoff communication between nursing staff
- B. Verify device code and pacemaker settings and document in the Electronic Health Record
- C. Ensure patient has a patent IV access this allows for treatment of arrhythmias if needed
- D. Provide post-op monitoring and pain control
- E. Obtain a chest x-ray as ordered to identify lead location and to detect possible complications
- F. Keep the incision clean and dry.
 - Encourage bed baths rather than showers for the first 7 days after pacemaker implant
 - Do not rub site
 - Pat incision site dry
- G. Minimize motion of the extremity closest to the insertion site for 48 hours.
 - Avoid over-the-head motion for 5 days post insertion or as ordered
 - Do not lift objects over 10 lbs with arm on the same side of pacemaker
- F. Reportable conditions:
 - Fever, signs of infection at the incision site or dehiscence of the incision
 - Chest pain/pressure, unusual or increasing short of breath, new or unusual fatigue
 - Continuous, rhythmic hiccupping
 - Sudden weight gain
 - Swelling in the fingers or ankles or swelling in the arm on the side of pacemaker insertion
 - Dizziness, syncope, hypotension and/or bradycardia
 - Decreased urine output from baseline
- G. When admitted to ICU or PCU, place the patient on continuous EKG monitoring for at least 24 hours after pacemaker insertion. Report:
 - Failure to fire
 - Failure to capture
 - Failure to sense
 - Firing rate faster than pacemaker maximum programmed rate or greater than is appropriate for patient's activity level
 - Any noted episode of overdrive pacing or defibrillation
 - Any abnormal rhythm

III. <u>Patient Education</u>

- A. Instruct patient on pacemaker precautions and care
- B. Provide permanent pacemaker discharge instructions (Attachment A)
- C. Patient or family must report any of the following
 - a. Syncope or near-syncope,
 - b. Muscle twitching over the pacemaker site,
 - c. Frequent hiccups
 - d. Pulse slower that than the preset lowest setting
 - e. Signs of site infection
 - f. Signs of pacemaker migration
- D. Instruct patient to avoid close contact with machinery or placing cellular devices near the pacemaker
- E. Patient must maintain his/her regular appointments, to allow provider proper follow up and monitoring of the device and patient condition
- F. Provide the patient with the pacemaker information to include:
 - a. Type and manufacture
 - b. Serial number

- c. Pacemaker rate setting
- d. Date implanted
- e. Practitioner's name
- G. Recommend the use of medical alert bracelet indicating patient has a pacemaker

IV. Documentation

- A. Ensure the pacemaker implant record is in the front of the patient's chart.
- B. If the patient is on an EKG monitor, place a strip in the progress notes at the start of each shift and whenever there is a significant change in the patient's rhythm or a reportable event.
- C. Document patient assessment and reportable conditions in the EHR
- D. Document education provided to patient and family
- V. <u>Post Discharge Follow-Up</u>
 - A. Patient will be followed by the Cardiology Clinic.
 - B. Advise patient to have regular pacemaker check-ups as per manufacturer's guidelines post discharge

Revised By:

Harmeet Kaur, MSN, RN, FNP-BC, CRRN

References:

- AACN. (2023). *Procedure manual for high acuity, progressive, and critical care* (8th ed.). (D. L. Wiegand, Ed.) St. Louis, MO: Elsevier.
- AHA. (2022). *Living with your pacemaker*. Retrieved from American Heart Association: https://www.heart.org/en/health-topics/arrhythmia/prevention--treatment-of-arrhythmia/living-with-yourpacemaker
- Lippincott Procedures. (2020). *Permanent pacemaker care*. Retrieved from https://procedures.lww.com/lnp/view.do?pId=2525385&hits=pacemaker,pacemakers&a=true&ad=false

06/00 - New 06/02 - Revised 11/04 - Reviewed 06/11 - Revised 11/14 - Revised 11/16 - Revised 11/20 - Revised 12/23 - Revised

Attachment (A)



Permanent Pacemaker – Discharge Instructions

- 1. Keep the incision clean and dry for 72 hours after the pacemaker has been implanted.
- 2. Minimize motion of the extremity closest to the insertion site for 48 hours.
- 3. Allow about eight weeks for your pacemaker to settle in place. During this time, avoid sudden movements that would cause your arm to pull away from your body.
- 4. Avoid causing pressure where your pacemaker was inserted .
- 5. Wear loose fitting clothing around the area of pacemaker implantation until it heals.
- 6. Women may want to wear a pad to protect the incision from their bra strap.
- 7. Follow the physician's recommendation regarding activity level
- 8. Avoid performing difficult arm maneuvers, excessive stretching or bending.
- 9. Avoid contact sports until permitted by physician.
- 10. Do not lift, push or pull more than 10 lbs. for 2 months after surgery. Have someone else do the vacuuming, carry the laundry and bring in groceries from the car.
- 11. Do not drive until your cardiologist gives his/her okay.
- 12. You may resume sexual activity when recommended by physician.
- 13. Call your cardiologist immediately if you experience any of the following:
 - Any signs of infection at the incision site (redness, drainage, pain or foul odor)
 - Fever
 - Chest pain
 - Dizziness or fainting
 - Shortness of breath
 - Continuous rhythmic hiccupping
 - Sudden weight gain
 - Swelling in your fingers, hand, or arm on the side of the pacemaker.
- 14. Carry the pacemaker identification card from the manufacturer at all times and wear a medical alert bracelet or tag to alert healthcare professionals in case you are unable to tell them.
- 15. Tell all your doctors and dentists that you have a pacemaker. Your dentist should give you an antibiotic before doing any procedures during the first 6 months after pacemaker placement.
- 16. Stay away from electromagnetic fields, since they can affect or even damage your pacemaker. While it's best to check the pacemaker manufacturer's guide regarding sources of electrical interference, the following are some guidelines:
 - a. Stay clear of large stereo speakers, which contain big magnets and chain saws, which generate electric sparks.
 - b. If you are going to work on a car engine, turn it off first to avoid the strong electrical current coming from the coil and distributor.
 - c. When entering stores, banks or other secure areas that have anti-theft devices, it's okay to walk through the up-right posts, but do not stop in the middle or lean against the posts.
 - d. Keep scanning wands, such as those used in many airports and courtrooms, at least six inches away from the pacemaker's pulse generator.
 - e. Keep cell phones at least six inches away from the pacemaker's pulse generator. Some pacemaker manufacturers, however, now say there are acceptable frequencies at which a cell phone can operate.
 - f. Show your pacemaker identification card to personnel if you trigger an alarm.
- 17. Maintain follow-up care with physician as recommended.
- 18. Take medications as directed by the physician