Ensuring Proper Administration of Subcutaneous Heparin in Post-Operative Cardiothoracic Surgery Patients.

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Published In/Presented At  
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Purpose

- Ensure Cardiothoracic (CT) surgery patients are receiving scheduled subcutaneous heparin doses appropriately during pacer wire removal on post-op day 3 (POD #3)
- P.I.C.O.
  - P: OHU/TOHU Nurses
  - I: Education of holding medications policy and RN scope of practice on holding medications and notification of provider
  - C: Holding subcutaneous heparin POD #3 without an order vs. only holding medication with an order
  - O: Eliminate the inappropriate holding of medications without a provider order

Background

- Subcutaneous heparin is generally held POD #3 before epicardial pacer wire removal to minimize bleeding risk
- Nurses would hold heparin dose without order from provider before pacer wire removal
- PA Nurse Practice Act states that an RN must have a provider order to administer or hold medications (Pennsylvania Nurse Practice Act, 2002)

Survey Results

- A survey was sent to all 90 OHU/TOHU nurses about holding and administering subcutaneous heparin POD #3. Thirty seven surveys were completed.

Evidence

- Current Policy states that for a medication to be held there must be a provider order. (LVHN Patient Care Manual- Medication-Administration-Patient Care Services, 2017)
- Subcutaneous heparin is effective in preventing post-op DVT’s (Rydberg et al., 1999)
- Effective communication between nurses and providers is vital for quality patient care and safety (Flicek, 2012)
- Subcutaneous heparin minimally increases risk of bleeding, however evidence is inconclusive with patients who have epicardial pacing wires (Li et al., 2011)

Methodology and Implementation Plan

- Contrary to survey results, an order to hold subcutaneous heparin was present in 20/25 charts of patients with epicardial pacing wires prior to staff education
- However, policy states there must be an order for every medication held
- Education of staff was performed reminding them of LVHN policy through means of staff meeting (2), shift huddle (5), and 1:1 conversation (42 nurses)
- After education was performed, charts of patients with epicardial pacing wires were reviewed
- Current Policy states that for a medication to be held there must be a provider order. (LVHN Patient Care Manual- Medication-Administration-Patient Care Services, 2017)
- Subcutaneous heparin is effective in preventing post-op DVT’s (Rydberg et al., 1999)
- Effective communication between nurses and providers is vital for quality patient care and safety (Flicek, 2012)
- Subcutaneous heparin minimally increases risk of bleeding, however evidence is inconclusive with patients who have epicardial pacing wires (Li et al., 2011)

Results and Recommendations

- It was found that 25/25 charts contained a hold order for subcutaneous heparin post education
- Recommend continued staff education with a mandatory TLC to ensure compliance
- Propose periodic chart review to ensure policy is being followed

REFERENCES