

Medications

enoxaparin sodium; Lovenox

- *Pharmacologic Class:* Low-molecular heparin (Jones & Bartlett Learning, 2022, p. 455)
- *Therapeutic Class:* Anticoagulant (Jones & Bartlett Learning, 2022, p 455)
- The patient is taking this medication to help avoid deep vein thrombosis.
- Nursing assessments prior to administration subQ:
 - o Check patient's allergies
 - o Place patient in supine position
 - o "keep protamine sulfate nearby in case of accidental over dose" (Jones & Bartlett Learning, 2022, p 457).

hydromorphone hydrochloride; Dilaudid 661-665

- *Pharmacologic Class:* Opioid (Jones & Bartlett Learning, 2022, p. 661)
- *Therapeutic Class:* Opioid analgesic (Jones & Bartlett Learning, 2022, p. 661)
- *Controlled substance schedule 2* (Jones & Bartlett Learning, 2022, p. 661)
- The patient is taking this medication to help with their pain from their pneumothorax and rib fractures.
- Nursing Assessments prior to administration:
 - o Check patient's allergies
 - o Educate the patient of the adverse effects
 - o Know that this is a highly addictive drug

naloxone hydrochloride; Narcan 941-943

- *Pharmacologic Class* Opioid antagonist (Jones & Bartlett Learning, 2022, p. 941)
- *Therapeutic Class:* Antidote (Jones & Bartlett Learning, 2022, p. 941)
- The patient could be taking this medication to treat "opioid-induced respiratory depression" since the patient is taking Dilaudid (Jones & Bartlett Learning, 2022, p 941).
- Nursing Assessments prior to administration:
 - o Check patient's allergies
 - o "keep resuscitation equipment readily available" (Jones & Bartlett Learning, 2022, p 941)
 - o Educate yourself and the patient on the adverse side effects of this medication.

propranolol hydrochloride; Hemangeol 1123-26

- *Pharmacologic Class:* Beta-adrenergic blocker
- *Therapeutic Class:* antihypertensive
- The patient is taking this to help with their hypertension.
- Nursing assessments prior to administration:
 - o Check patient's allergies
 - o Make sure the patient's apical pulse and blood pressure is within normal range (Jones & Bartlett Learning, 2022, p. 1124)
 - o "Protect the medication from light" (Jones & Bartlett Learning, 2022, p. 1124)

Demographic Data

Date of Admission: 2/17/2024
Admission Diagnosis/Chief Complaint: Pneumothorax & Rib Fractures
Age: 51
Gender: Female
Race/Ethnicity: White
Allergies: NKA
Code Status: Full
Height in cm: 170 cm
Weight in kg: 54.5 kg
Psychosocial Developmental Stage: Middle age, Generativity vs. Stagnation
Cognitive Developmental Stage: Formal Operational Stage
Braden Score: 19

Admission History

The patient had a fall and was admitted to the hospital on 2/17/2024. The patient presented with a pneumothorax and factures on the R. 8th and 9th ribs. The patient said the pain started right after the fall in the right upper chest. The patient's pain is constant. When asking the patient what the pain felt like she said it felt "really sore." There are no other factors that contribute to the pain. The patient said the medications help relieve the pain. She just started being treated for the injury when she was admitted.

Pathophysiology 509-510

Disease process: My patient presented with a pneumothorax which is also known as a collapsed lung. My patient received this from a fall on 2/17/2024; therefore, my patient has a traumatic pneumothorax (Capriotti & Frizzell, 2020, p. 509). My patient also had two fractured ribs that occurred from her fall. When my patient fell it is likely that the rib fracture is what penetrated the pleural membrane (Capriotti & Frizzell, 2020, p. 509). A pneumothorax is "the presence of air in the pleural cavity that causes collapse of a large section or whole lobe of lung tissue" (Capriotti & Frizzell, 2020, p. 509). When the patient fell, her fractured ribs penetrated the pleural cavity. This then allowed an accumulation of air to enter, causing a pneumothorax.

S/S of disease: Some signs and symptoms of this injury include "chest pain, dyspnea, and increased respiratory rate" (Capriotti & Frizzell, 2020, p. 510). My patient said that she had lots of soreness in her chest and was on a high oxygen rate due to her dyspnea. My patient's respiratory rate was in the normal range.

Method of Diagnosis: A chest radiography "will reveal presence of air or blood in the pleural space" which portrays a pneumothorax (Swaringen & Wright, p. 131). If the chest radiograph does not show if there is a pneumothorax, they can do a CT scan to view the pleural space (Swaringen & Wright, p. 131). My patient had a CT scan to help diagnose her pneumothorax.

Treatment of disease: If a traumatic pneumothorax is present, it "requires a chest tube with suction" (Capriotti & Frizzell, 2020, p. 510). With a chest tube, it will help get the air out of the pleural cavity so the lung can go back to its normal size (510). My patient had a chest tube present.

Physical Exam/Assessment

General: Patient is A/O 4, patient is in distress from the amount of pain she is experiencing from her pneumothorax, her overall appearance is appropriate for her age.

Integument: No cyanosis, erythema, or pallor present; Skin was dry and intact; Temperature was warm to touch; No rashes present; No bruises present; Patient had a chest tube placed in her upper right chest

HEENT: head was symmetrical and no abnormalities; Neck had no deep vein distention and no seen abnormalities; Ears- no equipment in the room to look directly into the ears; the patient's hearing was good from the conversations we had; Eyes- no equipment in the room to look directly in the eyes; patient was following me and the nurse with her eyes to show she had good vision, no liquid leaking from the patient's eyes; sclera was white and conjunctiva pink; Nose- no discharge from the nose and the septum of the nose was centered; Teeth- patient did not have dentures, but teeth showed brown stains from smoking

Cardiovascular: Heart sounds normal, no murmurs, S1 and S2 heard; Pulses were a +2; No neck vein distention

Respiratory: No accessory muscles were being used to breath; patient was on 4 L of oxygen through a nasal cannula; patient presented with crackles and wheezing on R. side of chest

Genitourinary: Patient did not urinate while I was there; patient did not have a catheter present

Gastrointestinal: Normal diet at home; Normal diet currently; 170 cm; 54.5 kg; Bowel sounds were hypoactive in all four quadrants; Last BM: 1/16/2024; No pain with palpating; No distention or drains present in the abdomen, chest tube in upper chest; No ostomy; No NG

Musculoskeletal: Patient has full ROM, patient is a one-assist when getting up to walk around or go to the bathroom; patient is weak from her injury, patients strength in her hands and feet were a +1

Neurological: Patient was oriented to person, place, situation, time; Normal cognition; Strength is equal in all extremities; Patient's speech was clear and was able to express her wants; Patient was able to answer questions clearly and appropriately; Patient was aware of her surroundings

Most recent VS (include date/time and highlight if abnormal): 2/19/2024; 0725; BP- 110/70, Heart Rate- 76, O2- 100%, Respirations- 12, Temperature- 37.4 Celsius

Pain and pain scale used: Patient said pain was a 6/10 on the numerical rating scale at 0725; patient was groaning from the pain; patient said it was "very sore"

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Decreased Gas Exchange related to “decrease lung expansion occurring with pneumothorax” as evidenced by the patient having difficulty breathing when off oxygen (Swaringen & Wright, p. 132).	Acute Pain related to fractured ribs and pneumothorax as evidenced by the patient ranking their scale as a six out of ten and groaning.	Potential for pressure injury related to pain causing immobilization as evidenced the patient not moving the four hours I cared for her.
Rationale I chose this nursing diagnosis because it is very important. A patient’s breathing and airway is the top priority when it comes to caring for a patient.	Rationale I chose this nursing diagnosis because the patient told me that she was in a lot of pain. I could also tell that they were in a lot of pain by their nonverbal cues she was portraying.	Rationale I chose this nursing diagnosis because it is very likely the patient could receive a pressure injury. If the patient is in too much pain to move their body, then a pressure ulcer is a major concern.
Interventions Intervention 1: Assess the patient’s mental status and vital signs, especially their oxygen level every 2 hours. Intervention 2: Keep the patient on oxygen as ordered.	Interventions Intervention 1: Assess the patient every 2 hours to check the rating of their pain. Intervention 2: Administer any pain medications as ordered by the provider.	Interventions Intervention 1: Reposition the patient every 2 hours. Intervention 2: Do a skin assessment on the bony prominences to look for red marks.
Evaluation of Interventions After assessing the patient’s vital signs and mental status, the nurse should find that they are A/O times 4 with an oxygen level above 95% if they are on oxygen.	Evaluation of Interventions After the client receives their pain medication that is ordered then their pain level should decrease the next time that they are assessed.	Evaluation of Interventions After moving the patient every two hours, the nurse should see that there are no red marks on the patient’s body.

References (3) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives*. (2nd ed.). F.A. Davis Company.

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Swaringen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: medical surgical, pediatric, maternity, and psychiatric-mental health*. St. Louis, MO: Elsevier