Trauma Clinic Advanced Practice Guidelines For Rib Fractures

In accordance with the Division of Trauma Practice Guidelines Manual and the Practice Guidelines for Acute Care Nurse Practitioners

I. Definition
   A. The management of rib fractures, following discharge from the hospital, requires a precise history and physical examination to minimize the incidence of misdiagnosis and increase incidence of finding complications. Instability of the chest wall limits chest wall movement and abnormal movement of the chest wall can result in hypoventilation and in poor secretion clearance. Possible complications might include respiratory failure, pneumothorax, hemothorax, empyema, and pleural effusion.

II. Assessment
   A. Subjective Information
      1. History of Present Illness
      2. Past Medical and Surgical History
      3. Current Medications with total amount of pain medication
      4. Allergies
      5. Recent Follow-up Appointments
      6. Chief Complaint
      7. Frequency of incentive spirometer use
      8. Sleeping position, such as recumbent or lying flat
      9. Home oxygen requirements
   B. Objective Information
      1. Physical Examination
         a. Vital Signs: Temperature, Respiratory Rate, Heart Rate, Blood Pressure
         b. Respiratory Effort
         c. Chest Excursion
         d. Subcutaneous Emphysema
         e. Breath Sounds
         f. Heart Sounds
         g. Adequate cough and level of pain management required to achieve
      2. Laboratory Examination when symptomatic
         a. Complete Blood Count with Platelet Count
         b. Basic Metabolic Panel
      3. Radiographic Examination when symptomatic
         a. PA and Lateral Chest X-ray
         b. Chest CT Scan

III. Management
   A. Evaluate history of present illness
      1. Evaluate patient’s level of pain
         a. Determine the amount of pain medication the patient is consuming to control pain
b. Determine the level of activity the patient is able to tolerate before experiencing intolerable pain
c. Determine if patient is able to tolerate using an incentive spirometer

2. Evaluate patient’s sleeping position
3. Evaluate patient’s use of home oxygen after discharge

B. Determine the level the patient is able to achieve with the incentive spirometer
1. If patient unable to achieve greater than 1000ml, then obtain chest x-ray
2. If patient able to achieve greater than 1000ml, then do not obtain chest x-ray

C. Determine if patient is experiencing clinical symptoms, such as SOB, difficulty breathing, dizziness, lightheadedness, etc.
1. Consider chest x-ray
   a. If chest x-ray abnormal, consider notifying attending to discuss further evaluation and planning
   b. If chest x-ray normal, then schedule patient to follow-up in the trauma clinic in 2 weeks.

D. Determine if patient is experiencing clinical symptoms of fever, chills, night sweats, nausea, or vomiting
1. If patient is experiencing clinical symptoms of fever, chills, night sweats, nausea, or vomiting, then obtain complete blood count
   a. If white blood cell count elevated, then obtain chest x-ray
2. If patient is not experiencing clinical symptoms of fever, chills, night sweats, nausea, or vomiting, then schedule appropriate follow-up visit

E. Follow pain management clinical guideline.
1. Increase NSAID intake at home

F. Instruct patient to continue performing aggressive pulmonary toilet, such as coughing and deep breathing

G. Instruct patient to continue using incentive spirometer aggressively.

IV. References