Indications for Prone Positioning of Non-Intubated Patients

- Acute Respiratory Distress Syndrome (ARDS)
- Potential Good Candidates Patients Requiring Oxygen
  - Nasal Cannula greater than 4 LPM
  - High Flow Nasal Cannula less than or equal to 60%
  - Other delivery methods (venturi-mask) equivalent to the above
- Candidates must have the ability to independently
  - Communicate
  - Turn head
  - Move out of the prone position
- Do not use prone positioning as an alternative or potential to delay intubation.

Contraindications for Proning Non-Intubated Patients

- Unstable cervical, thoracic, lumbar, pelvic, skull, or facial fractures
- Use of cervical or skeletal traction
- Uncontrolled or increased intracranial pressure
- Open chest or abdominal wounds, chest tubes, burns.
- Open wounds on face or ventral body surfaces
- Abdominal compartment syndrome
- Pregnancy
- Unstable cardiac rhythms
- Hemodynamic instability
- Respiratory Failure
  - Respiratory Rate above 40 per minute
  - pCO2 greater than 50 mmHG
  - pH less than 7.30
  - Obvious accessory muscle use
  - Immediate need for intubation
- Airway considerations
  - Tracheostomy not on mechanical ventilation
  - Patient unable to protect airway
Guidelines for Prone Positioning for Adult Patients with Acute Respiratory Distress Syndrome (ARDS) for Non-Intubated Patients

- Patients with obstructive sleep apnea

  - Weight
    - Less than 88 lbs (40 kg)
    - Greater than 300 lbs (136.4 kg)

  - Height
    - Greater than 78 in (201.2 cm)

Care Activities

- Ensure patient condition, stature, and bed can facilitate repositioning to a prone position.
- Explain purpose and expected comfort level to patient prior to repositioning.
- Patients receiving tube feeding: Evaluation of gastric residual volume and hold tube feeding 1 hour prior to prone positioning.
- Resuming and holding of tube feeding will be at the discretion of the provider.
- Patients requiring telemetry monitoring. Place EKG leads/electrodes on patient back.
- Application of appropriate skin protections (i.e. hydrocolloids dressings) should be implemented to avoid pressure injury.
- If necessary, eye and oral care should occur prior to and during prone positioning.
- Prone Positioning
  - Performed by the appropriate number of team members required to assist the patient with repositioning.
    - For conscious, cooperative patients, encourage self-pronning when appropriate.
    - Patients must have the ability to be able to remove themselves from the prone position if the position can no longer be tolerated.
    - Consider placing pillows over bony prominences, across chest near 3rd intra-costal space, across pelvic bone, and under knees.
  - When placing the patient in the prone position
    - Use the appropriate number of team members to safely execute the position change
    - Disconnect any non-essential equipment.
    - Ensure all remaining lines, tubes, and drains, oxygen have adequate length and flexibility. After position change re-check all required lines, tubes, and drains.
    - Ensure the abdomen is unrestricted.
- During prone position, if possible, obtain at least one arterial blood gas to evaluate effects.
- Document in the electronic medical record the amount time the patient is in a prone position. Items to consider for documentation start time, end time, patient tolerance, and total prone time.
- Consider returning patient to the supine position.
  - Patient unable to maintain or tolerate prone position
  - SaO2 is less than 88% for sustained periods of time.
  - Blood pressure SBP less than 90, MAP less than 65
Guidelines for Prone Positioning for Adult Patients with Acute Respiratory Distress Syndrome (ARDS) for Non-Intubated Patients

- HR less than 60 or greater than 130 for sustained periods of time

Additional Resources: Prone Positioning for Acute Respiratory Distress Syndrome, P-15, Hackensack University Medical Center Policy.