Awake Non-Intubated Proning Guidelines

**Purpose:**

Prone positioning can increase pulmonary capillary perfusion and oxygenation. Prone positioning expands the dependent lung areas. Expanding dependent lung areas opens collapsed alveoli, increasing ventilation capacity and improving oxygenation. Work of breathing can also be reduced with prone positioning as it decreases the pressure on the lungs from the cardiac structures and abdominal organs. Reducing work of breathing saves vital energy that the patient can use for healing and recovery. This document provides guidance for healthcare providers in the initiation and monitoring of prone positioning in non-intubated patients.

**SCOPE:**

This guideline is applicable to all ministries of SSM Health*, SSM Health St. Louis and its wholly owned operating entities, SSM Health Medical Groups, and all other wholly owned operating entities of SSM Health except for Navitus which maintains separate policies.

Original Effective Date: 4/10/2020

**DEFINITIONS:**

I. Supine: Position where patient is lying on their back.

II. Prone: Position where patient is lying on their stomach.

III. Right Lateral Recumbent (RLR): Position where patient is lying on their right side.

IV. Left Lateral Recumbent (LLR): Position where patient is lying on their left side.

V. Awake Proning: Prone positioning in the awake non-intubated patient to improve oxygenation.

**EQUIPMENT:**

- Pillows/positioning devices
- Supplemental oxygen, as needed
- Continuous O2 monitor, if inpatient
- Foam dressings to protect pressure points, if indicated
**PROCESS:**

I. Awake proning in the inpatient setting should be considered early in the diagnosis of hypoxemia and the patient has the following conditions:
   A. Hypoxemia without hypercapnia or significant work of breathing.
   B. Reversible lung injury in an attempt to avoid intubation.
   C. Normal mental status with an ability to communicate distress.
   D. No contraindications to awake repositioning/proning.
   E. The expressed desire of the patient not to be intubated.

II. Absolute contraindications include:
   A. Severe arrhythmias
   B. Spine instability
   C. Sternotomy within the previous 2 weeks
   D. Ophthalmic surgery within the previous 2 weeks
   E. Increased Intraocular pressure
   F. Open chest or unstable chest wall
   G. Trauma: Facial fractures or facial trauma within the previous 2 weeks or unstable pelvic fractures

III. Relative contraindications include:
   A. Delirium
   B. Confusion
   C. Inability to independently change positions
   D. Advanced pregnancy
   E. Recent nausea or vomiting
   F. Inability to tolerate prone position

IV. Nursing considerations prior to awake proning:
   A. Verify that patient has no contraindications to awake proning.
   B. Assess patient's mental status and patient's ability to independently change position in bed.
   C. Assess patient's skin and identify any areas at risk for potential breakdown, including breakdown related to use of medical devices.
      1. Use protective dressings and positioning devices as needed to prevent skin breakdown.
   D. Assess patient's SpO2, respiratory rate and effort.
      2. If oxygen is in use (nasal cannula, HFNC, or CPAP), document amount of oxygen and oxygen delivery device in use.
   E. Educate patient on benefits of participating in awake proning, how to enter the prone position and how often to change position.
   F. Encourage patient to consider physiologic needs and comfort strategies (i.e., toileting; nutrition; medications; call light, phone, or other device in reach; utilization of music or
television as a distraction; etc.) prior to entering the prone position to minimize interruptions during prone positioning.

G. EKG leads, if patient is cardiac monitored, may be moved to the patient’s back for comfort. However, leads may remain on the anterior chest wall for continuous monitoring, if patient prefers.

H. Initiate continuous SpO2 monitoring, if not already in place.

I. Ensure supplemental oxygen is on, if needed.

J. Gather additional pillows or positioning devices as needed to promote comfort.

V. Initial instance of prone positioning:

A. Patients experiencing respiratory symptoms or requiring supplemental oxygen should initially be placed in a one-hour period of prone position to assess tolerance to prone position.

B. Patient’s SpO2, oxygen device, L/min of O2, respiratory rate and effort should be assessed and documented immediately prior to proning and 1 hour after initial proning period.

C. In the prone position, the patient should lie on his/her stomach, with their upper body supported by their arms and a pillow.
   1. If patient requests, the head of bed may be raised slightly to promote comfort.
   2. Assist patient with use of pillows or positioning devices under the arms, hips or legs, as needed.
   3. Ensure all tubing is positioned so it does not become kinked underneath the patient.

D. Encourage patient to be mindful of discomfort due to pressure and to reposition self, as needed.

E. Monitor patient for signs of distress (i.e., decrease in oxygen saturations, increased work of breathing, etc.) and encourage patient to report any feelings of respiratory distress.
   1. There is often an initial decline in oxygenation with position change.
   2. If oxygen does not improve within one hour or if continued respiratory distress is assessed, assist patient to either the RLR, LLR or supine position and notify practitioner for further instructions.

F. After initial 1-hour period, the patient can reposition themselves to supine, RLR or LLR positions but should be encouraged to adopt the prone position as often as tolerated and able.
   1. The goal is for the patient to be in the prone position as frequently as tolerated while in bed.
   2. Closely monitor patients with co-morbidities that predispose them to rapid deterioration.

G. If patient was unable to tolerate the prone position, patient should still be encouraged to sit upright or utilize the RLR and LLR positions more frequently than the supine position.
   1. Patient should be encouraged to change positions at least every 2 hours.
   2. Patient should minimize the amount of time spent in supine position.

VI. Prone position as rescue therapy:

A. Prone position as a rescue therapy should not be used as a replacement for an ICU transfer or intubation. It is important to involve the medical team before attempting prone positioning as a rescue therapy.

B. Initiate for patients who develop an increasing oxygen need (an increase of >2L/min needed to maintain an SpO2>90%) and are at risk for respiratory failure.
• Assess and document O2 L/min, O2 device, respiratory rate and SpO2
C. Notify the medical team of worsening hypoxemia and/or increased work of breathing.
D. Assist the patient into the prone position.
E. If the patient stabilizes (decreased RR, increased SpO2, decreased O2 need) reassess per patient condition.
F. If the patient does not stabilize or demonstrates further respiratory decline, activate the emergency response system.

DOCUMENTATION:

Documentation of assessments, reassessments, interventions and tolerance of prone positioning will occur within the electronic health record.

REFERENCES:

1. Massachusetts General Hospital, Version 1.0 04/02/2020, Copyright 2020, publicly available content.


https://emcrit.org/pulmcrit/proning-nonintubated/


5. Nursing Critical Care 2020:
https://journals.lww.com/nursingcriticalcare/Fulltext/2012/03000/Prone_positioning_for_patients_with_ARDS.6.aspx

6. Trinity Health, Version 1.0 04/08/2020, Copyright 2020, publicly available content
