

PRONE POSITION: Intubated and Non-intubated Patient with ARDS/Covid-19 ARDS

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PRONE POSITIONING



Prone positioning is a technique of turning a patient from the supine to the prone position in an attempt to recruit alveoli and improve oxygenation in intubated and non-intubated patients with ARDS (Acute Respiratory Distress Syndrome) or Covid-19 ARDS².

This article from the National Pressure Injury Advisory Panel (NPIAP) states to pay special attention to the following areas: Head, Torso, Legs, Breasts and Genitalia

Recommendations are as follows:

- Use a pressure redistribution surface
- Use positioning devices, prophylactic dressings and other products
- Use pillows to offload pressure points
- Reposition into swimmer position
- Microshifts and small position changes should be performed while proned.

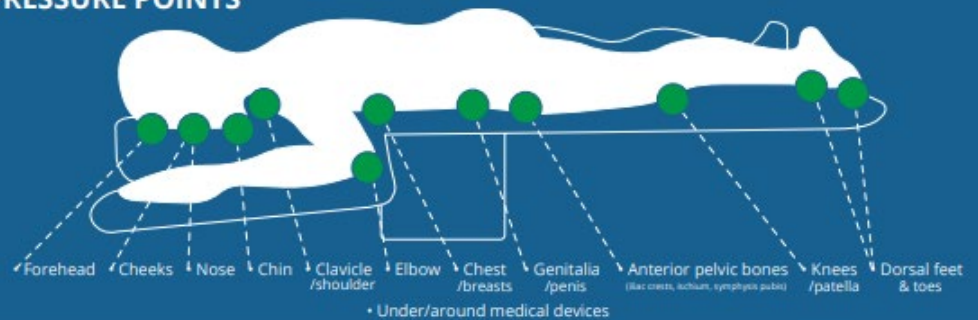
Assess all pressure points:

- Prior to proning (anterior surfaces).
- Prior to returning to supine position (posterior surfaces).
- When alternating arm position in swimming arm position, assess integrity of skin of arm/head/face.
- Document all skin assessments and preventive measures.

GENERAL TIPS

- Use a **pressure redistribution surface** (for those not on a bed specifically designed for proning)
- Follow manufacturer instructions when using beds, positioning devices, prophylactic dressings and other products.
- **Positioning devices/pillows** are needed to offload pressure points.
- Involve enough trained staff to avoid friction-shear when repositioning. May reposition into swimmer position.
- Microshifts and small position changes should be performed while proned, especially in non-rotating beds.
- Assess all **pressure points**:
 - Prior to proning (anterior surfaces). Prior to returning to supine position (posterior surfaces).
 - When alternating arm position in swimming arm position, assess integrity of skin of arm/head/face.
 - Document all skin assessments and preventive measures.

PRESSURE POINTS



PAY SPECIAL ATTENTION TO THE FOLLOWING AREAS

HEAD

- Apply soft silicone multi-layered foam **prophylactic dressings** to pressure points on face.
- **Manage moisture:** Suction oral secretions. Use liquid skin protectants/sealants on face. Change foam dressing prn. Apply hydrofiber/calcium alginate dressing under prophylactic dressing to manage excess moisture.
- Apply **thin foam dressings under medical devices.** Avoid multiple layers of dressings that increase pressure.
- **Offload head** with offloading device(s): Consider the density of foam, height of the cushion, angle of the face, and endotracheal tube (ETT) positioning when selecting an appropriate device.
- With manual proning, **shift patient's head** q 2 hours; re-position head q 4 hours. May adjust timing to patient needs.
- Note: commercially available ETT securement devices may contribute to increased skin breakdown in proned patients. Assess skin carefully. Consider tape to secure ETT during proning.
- Maintain **eye care** to prevent corneal abrasions. Apply ophthalmic lubricant. Tape eyelids shut horizontally.
- Ensure tongue is inside patient's mouth. A small soft bite block may help. Assess tongue for injury.

TORSO

- Place EKG leads on back while proning.
- Apply prophylactic foam dressings to pressure points.
- Ensure central lines, arterial lines and cannulas are secured (e.g., sutured).
- Empty ileostomy/colostomy pouches and pad around stoma site.
- If receiving enteral feedings, turn off feeding 1 hour before prone position
- Secure all tubes and devices away from skin; protect surrounding skin with prophylactic dressings and bridge areas with positioning devices.
- Create channels for tubes with positioning aids. Ensure that there are no unsecured devices under the torso.

LEGS

- Apply prophylactic foam dressings to pressure points (e.g., patella and pretibial area).
- Remove securement devices and align urinary catheter/fecal management device toward foot of bed.
- Ensure that there are no unsecured devices under legs. Offload feet.

BREASTS & GENITALIA

- are particularly sensitive tissues that should be offloaded and protected



PRESSURE INJURY PREVENTION

PIP Tips for Prone Positioning

Repositioning Principles

- Reposition the individual to relieve or redistribute pressure using manual handling techniques and equipment that reduce friction and shear.
- Reposition individual in such a way that optimal offloading of all bony prominences and maximum redistribution of pressure is achieved.
- Once positioned check for uneven distribution of pressure and positioning of medical devices if possible.
- Use a soft silicone multi-layered foam dressing to protect the skin for individuals at risk of pressure injuries.
- Reposition unstable critically ill individuals who can be repositioned using slow, gradual turns to allow time for stabilization of hemodynamic and oxygenation status.
- Regularly monitor the tension of medical device securements.
- Assess the skin under and around medical devices.
- Use a thin prophylactic dressing beneath a medical devices.
- Regularly rotate or reposition the device if possible.
- Avoid positioning the individual directly onto medical devices.

SPECIAL CONSIDERATIONS:

ACUTE RESPIRATORY DISTRESS SYNDROME AND PRONING (INCLUDING WITH COVID-19)

Rationale for Proning in ARDS

- Eight RCTs have demonstrated improved oxygenation and reduced mortality with prone positioning in moderate and severe ARDS.^{2,3}
- Prone positioning in ARDS enhances oxygenation by improving alveolar recruitment and ventilation-perfusion ratios while decreasing strain on lung tissue and the risk of ventilator injury.^{4,5}

Special considerations with ARDS

- Consider the potential impact of oxygenation deficits on the risk of pressure injuries. (Recommendation 1.9)
- Episodes of prone positioning usually last for 12 or more hours.¹
- Make small shifts in body position and reposition head every 2-4 hours or as required by patient.
- Major complications of proning in ARDS include displacement of ET tube, pressure injuries and loss of venous access.²
- If proning in combination with ECMO, carefully secure and offload the ECMO cannula.

BEDS AND POSITIONING DEVICES DESIGNED TO SUPPORT PRONE POSITIONING

Beds

- Proning can be done manually on a specialty support surface with high quality pressure redistribution and shear reduction features.
- Beds specifically designed for prone positioning combine prone positioning features and the ability to rotate the bed 40 to 62 degrees. The rotation feature facilitates drainage of pulmonary secretions and enhances ventilation-perfusion matching.
- Follow manufacturer instructions and training when using beds designed for proning.¹ The rotation feature should not be used with unstable fractures, cervical or skeletal traction and uncontrolled intracranial pressure.

Positioning Devices

- Several devices are commercially available to support prone positioning. They are made of various materials designed to redistribute pressure and reduce shear stress and strain. Devices include those specifically designed for the head and torso, as well as, cushions that can be molded to conform to the body.
- Follow manufacturer instructions and training recommendations when using positioning devices designed for prone positioning.

2019 INTERNATIONAL PRESSURE INJURY GUIDELINE RECOMMENDATIONS (Refer to full guideline for supporting evidence)

Repositioning Principles

- Determine repositioning frequency with consideration to the individual's level of activity, ability to independently reposition and tissue tolerance. (5.2)
- Reposition the individual to relieve or redistribute pressure using manual handling techniques and equipment that reduce friction and shear. (5.6)
- Reposition individual in such a way that optimal offloading of all bony prominences and maximum redistribution of pressure is achieved. (5.5)
- Once positioned check for uneven distribution of pressure and positioning of medical devices if possible.
- Consider using continuous bedside pressure mapping as a visual cue to guide positioning. (5.7)
- Use a soft silicone multi-layered foam dressing to protect the skin for individuals at risk of pressure injuries. (3.5)
- Do not use ring or donut-shaped positioning devices.
- Avoid extended use of prone positioning unless required for management of

the individual's medical condition. (5.10)

- Reposition unstable critically ill individuals who can be repositioned using slow, gradual turns to allow time for stabilization of hemodynamic and oxygenation status. (5.17)
- Initiate frequent small shifts in body position for unstable critically ill individuals who are too unstable to maintain a regular repositioning schedule and to supplement regular repositioning. (5.18)

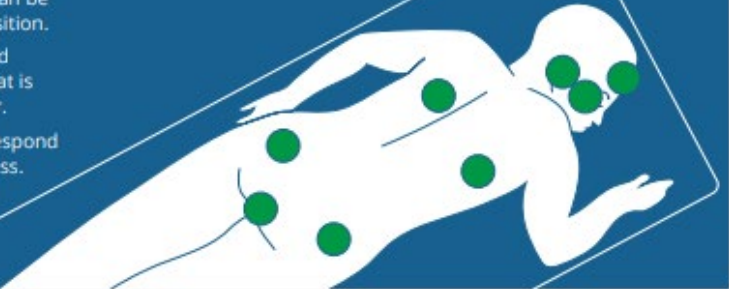
Medical Devices

- Regularly monitor the tension of medical device securements. (8.2)
- Assess the skin under and around medical devices. (8.3)
- Use a thin prophylactic dressing beneath a medical device. (8.5)
- Avoid multiple layers of dressings that increase pressure.
- Regularly rotate or reposition the device if possible. (8.4)
- Avoid positioning the individual directly onto medical devices.

Disclaimer: This document is intended for educational and informational purposes only. It does not constitute medical advice for individual patient(s). Follow institutional policies, manufacturer recommendations and principles of sound clinical judgment in addressing the needs of individual patients.

SWIMMING/FREESTYLE POSITION

- Patients in standard prone position can be repositioned using the swimming position.
- Alternate the position of the arms and direction of the head, in a manner that is similar to that of a freestyle swimmer.
- Pressure points on the diagram correspond to the body surface facing the mattress.



Patients in standard prone position can be repositioned using the swimming position.

Cited References

1. European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel, and Pan Pacific Pressure Injury Advisory Panel, Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. Third ed. 2019: EPUAP-NPIAP-PPPIA. Available from: <https://guidelinesales.com/>
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7. Jackson, M.E., et al., Skin preparation process for the prevention of skin breakdown in patients who are intubated and treated with RotoProne. Respir Care, 2012. 57(2): p. 311-4. Available from: <http://rc.rcjournal.com/content/57/2/311>
8. American Association of Critical Care Nurses. <https://www.aacn.org/education/webinar-series/wb0042/why-prone-why-now-improving-outcomes-for-ards-patients>

Additional References and Resources

- An excellent educational program on prone positioning for ARDS can be found in the AACN Webinar Series-4,5
- American Association of Critical Care Nurses. <https://www.aacn.org/education/webinar-series/wb0042/why-prone-why-now-improving-outcomesfor-ards-patients>
- See this publication for a picture of facial prophylactic dressing placement techniques.7
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Your department can put a Prone Kit together so that all supplies are in one bin for easy access.

Pressure injury prevention

UCSF ALLEVYN LIFE body chart

Allevyn Foam Dressings

- Allevyn Foam dressings can be utilized for pressure ulcer prevention.
- It can stay in place for up to 7 days, which may reduce the frequency of dressing changes.
- Allevyn Foam Dressings can be found in the ICU storage area or you can have your department manager order these for your patients.

Supine position
 Occiput, Scapula, Elbows, Sacrum, Buttocks, Heels

Prone position
 Forehead or ear, depending upon position, Anterior shoulders and/or clavicles, Chin, Breasts (women), Genitalia (Men), Knees, Toes

Lateral position
 Ear, Lateral shoulder, Iliac crest, Trochanter, Malleolus

Jackknife position
 Forehead or ear, depending upon position, Iliac crests, Anterior shoulders, Knees, shins, Toes

Wilson Frame position
 Forehead or ear, depending upon position, Clavicles, Elbows, Iliac crests, Knees, Anterior ankles/feet

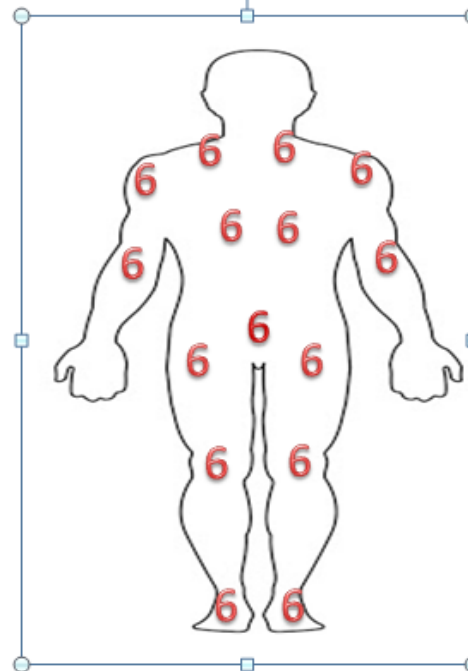
Application

1. Select the appropriate dressing from the range
2. Ensure that skin is clean and dry before applying ALLEVYN LIFE
3. Apply ALLEVYN LIFE as per the instructions for use

ALLEVYN LIFE	Dressing sizes Border to border	Pad size	Carton/ packaging
66801067	4 x 4in	2 x 2in	10
66801068	5 1/2 x 5 1/2in	3 x 3in	10
66801069	6 1/2 x 6 1/2in	4 x 4in	10
66801070	8 1/4 x 8 1/4in	6 x 6in	10
66801306	Sacrum 8 1/2 x 6 1/2in	4 1/2 x 3 1/2in	10
66801307	Sacrum 8 1/2 x 9in	6 1/2 x 4 1/2in	10
66801304	Heel 9 x 9 1/2in	7 1/2 x 8in	5

Allevyn Foam Dressings Placement Map

- The 1st diagram illustrates where to place each of the foam dressing onto the patient's face.
- The 2nd diagram illustrates where to place each of the foam dressings onto the patients body as well as under and/or around devices.



(Gentle Border Allevyn's can be found by respiratory supplies)

2x4 in = 2 each and 4x4 in = 6 each

1. Gentle border 2x4in. Rectangle
2. 2x4in rectangle cut in ½ lengthwise
3. Gentle border 4x4 in square (3 cut in ½ length wise)
4. 4x4 in square cut in ½ diagonal
5. 4x4 in square

(Large allevyn's found in storage room)

6.5x6.5 in = 15 each

6. Large Allevyn Life 6.5x6.5in
 - a. Clavicle
 - b. Shoulders
 - c. Elbows
 - d. Chest/Breast
 - e. Penis
 - f. Pelvic bone
 - g. Knee
 - h. Anterior ankle
 - i. Foot/toes

****Apply Under or Around medical devices****

PRONE POSITIONING FOR THE INTUBATED PATIENT

Guidelines for turning the intubated patient with ARDS/Covid-19 ARDS from supine to prone position in an attempt to increase pulmonary capillary perfusion and oxygenation (*MercyOne*, 2020).

Guidelines for turning the Intubated patient with ARDS/Covid-19 ARDS

These forms have been approved by Dr. Psihos, Intensivist and Hannah Risvold, ICU Manager.

1) Circumstances:

- a) Setting: ICU
- b) Benefits: improvement in pulmonary capillary perfusion and oxygenation in the intubated patient with ARDS/Covid-19 ARDS
- c) Contraindications: evaluate patient for the following absolute and relative contraindications.
 - **Absolute Contraindications** (*Nursing Center*, 2020, as cited in Gordon et al., 2019; Malholtra & Kacmarek, 2019):
 - Burns or open wounds on the anterior/ventral surface
 - Spinal instability and/or unstable fractures, particularly facial or pelvic
 - Massive hemoptysis
 - Deep vein thrombosis treated less than 48 hours
 - Mean arterial pressure (MAP) less than 65 mmHg; shock
 - Increased intracranial pressure
 - Pregnancy (2nd/3rd trimester)
 - **Relative Contraindications** (*Nursing Center*, 2020, as cited in Malholtra & Kacmarek, 2019):
 - Cardiac abnormalities: life threatening arrhythmias, newly placed pacemaker, ventricular assist device, balloon pumps
 - Thoracic or abdominal surgeries
 - First 24 hours following tracheostomy
 - Facial trauma
 - Recent ophthalmic surgery or increased intraocular pressure

2) Procedure

- (*Nursing Center*, 2020, as cited in Dirkes et al., 2012; Gordon et al., 2019; Lucchini et al., 2020). Prior to placing any patient in the prone position:
- Inspect and confirm endotracheal tube (ETT) placement and verify it is secure.
 - Ensure all intravenous lines and tubes are secure and have enough length for the rotation.
 - Draw arterial blood gas (ABG), as ordered.
 - Assess vital signs.
 - Adequately sedate the patient, as prescribed.
 - Gather pillows and/or foam pads to support head, neck, and shoulders. (Obtain Proning Kit)
 - Stop feedings up to one hour prior to proning and empty ostomy bags, if present.
 - Prepare ETT suctioning equipment.
 - Determine which direction you will turn the patient (toward the ventilator).

- Assemble the team: five or six people will be needed based on the size of the patient:
 - One to two people at the head of the bed to monitor ETT (preferably Respiratory Therapist), intravenous lines, and tubes
 - Two people on both sides of the patient to turn
 - Provider on standby in case the patient requires re-intubation
- Preoxygenate the patient with 100% FiO₂.
- Ensure continuous monitoring of pulse oximetry, mixed venous oxygenation saturation, end-tidal carbon dioxide, and invasive arterial blood pressure for the duration of procedure.

3) Step-by-step approach

(Nursing Center, 2020, as cited in Gordon et al., 2019):

- Pull patient to edge of bed furthest from the lateral position to be used while turning.
- Turn patient to lateral decubitus with dependent arm tucked under thorax.
 - Suction airways, as appropriate.
 - Remove ECG leads and patches from chest; reapply on back in mirror image position.
 - Place a new sheet on the side of the bed that the patient will face.
- Turn or logroll patient to prone position and use the sheet to reposition patient to center of bed.
- Ensure patient's face is positioned to one side (toward the ventilator).
- Confirm ETT is not kinked or migrated.
- Suction airways as appropriate.
- Support face, shoulder, and arms for patient comfort (*Nursing Center, 2020, as cited in Lucchini et al., 2020*).
 - Place the patient's head on a C-shaped foam pad to prevent facial pressure injuries.
 - Position limbs to prevent abnormal extension or flexion against shoulders and elbows; use pillows for additional support of hips, shoulders, and face.
 - Rolls may be placed under pelvis and chest in patients with poor neck flexibility, tracheostomy, or both.
- Auscultate chest to ensure proper ETT placement; adjust lines and drains; re-zero the transducer and verify ventilator settings.

4) Nursing Considerations

- Monitor sedation level and administer neuromuscular blockage, as prescribed.
 - Patient may require additional sedation to tolerate the prone position.
 - If patient continue to have ventilator desynchrony despite optimizing ventilator settings and sedation, consider a neuromuscular blocking agent.
- Adjust patient position to relieve pressure points, minimize pressure injuries and maximize secretion mobilization.

- Assess for pressure injury.
- Apply hydrocolloid dressing (Allevyn) to high risk areas; face, thorax, iliac crests, and tibial plateau (*Nursing Center, 2020, as cited in Lucchini et al., 2020*).
- Volume-controlled and pressure-controlled modes are typically delivered in the prone position.
- A positive patient response occurs when there is a sustained increase in PaO₂ by 10 mmHg or more stable FiO₂ or improvement in ventilator settings (*Nursing Center, 2020, as cited in Malholtra & Kacmarek, 2019*).
- Studies show that longer proning time (12-16 hours) has resulted in better outcomes (*Nursing Center, 2020, as cited in Lucchini et al., 2020*).
- Ensure proper nutrition is maintained and monitor for aspiration; tube feedings are most safely administered with the patient in supine position (*Nursing Center, 2020, as cited in Hudack, 2013*).
- Monitor for potential complications (*Nursing Center, 2020, as cited in Dirkes et al., 2012; Gordon et al., 2019*):
 - Increased secretions
 - Accidental removal of chest tube, central venous catheter, arterial line, thoracic or abdominal drains
 - Pressure injuries
 - Aspiration
 - Cardiac arrhythmias, cardiac arrest, hypotension
 - Transient oxygen desaturation
 - Pneumothorax
 - Facial edema
 - Vomiting

REFERENCES

Prone positioning for the non-intubated patient. (2020, April 9). *MercyOne*
 Prone positioning: mechanically ventilated patients. (2020, May). *Lippincott NursingCenter*.
<http://www.nursingcenter.com>

PRONE POSITIONING FOR THE NON-INTUBATED PATIENT

Guidelines for turning the non-intubated patient with ARDS/Covid-19 ARDS from supine to prone position in an attempt to increase pulmonary capillary perfusion, oxygenation, and potentially decrease the need for intubation (*MercyOne, 2020*).

1. Benefits: potential physiological benefits include:

- a) Improved ventilation /perfusion
- b) Reduced hypoxemia
- c) Reduced shunt
- d) Recruitment of the posterior lung segments due to reversal of atelectasis
- e) Improved clearance of secretions (*NursingCenter, 2020*)

2. Circumstances:

- a) Setting: Any inpatient meeting criteria (as stated below)
- b) Considerations: Prone position considerations for the non-intubated awake patient with ARDS or COVID-19 ARDS:
 - I. Any inpatient with isolated hypoxemic respiratory failure without substantial dyspnea. A reasonable candidate may meet the following criteria:
 - a) Not in multi-organ failure
 - b) Expectation that patient has a fairly reversible lung injury and may avoid intubation
 - c) No hypercapnia or substantial dyspnea
 - d) Normal mental status, able to communicate distress (*MercyOne, 2020*)
 - e) Suspected or confirmed COVID-19 infection
 - f) FiO2 greater than or equal to 28% or requiring basic respiratory support to achieve SaO2 92% to 96% (88% to 92% if risk of hypercapnic respiratory failure)
 - g) Ability to rotate to front and adjust position independently
 - h) Absence of anticipated airway issues (*NursingCenter, 2020*)
 - i) Patients who do not wish to be intubated (DNI) and can tolerate the prone position (*MercyOne, 2020*).

3. Contraindications: Evaluate patient for the following absolute and relative contraindications:

- 1. Absolute contraindications:
 - a) Respiratory distress
 - b) Immediate need for intubation
 - c) Hemodynamic instability (SBP less than 90 mmHg) or arrhythmia
 - d) Agitation or altered mental status
 - e) Unstable spine/thoracic injury/recent abdominal surgery (*NursingCenter, 2020*)
- 2. Relative contraindication:
 - a) Facial injury

Guidelines for turning the Non-Intubated patient with ARDS/Covid-19 ARDS was created

These forms have also been approved by Dr. Psihos and Hannah Risvold, ICU Manager

- b) Neurological issues (e.g. frequent seizures)
 - c) Morbid obesity
 - d) Pregnancy (2nd/3rd trimesters)
 - e) Pressure injuries (*NursingCenter*, 2020)
3. Procedure: Assess mobility, mental status, and evaluate for contraindications to prone position, if no contraindications are present proceed by explaining the procedure (*MercyOne*, 2020).
- a) Ensure oxygen therapy and basic respiratory support; make sure there is adequate length of tubing.
 - b) Use pillows, as needed, to support the chest.
 - c) Reverse Trendelenburg position may aid comfort.
 - d) Monitor oxygen saturation for 15 minutes. Goal is SpO₂ 92% to 96%, 88% to 92% if risk of hypercapnic respiratory failure.
 - e) Continue prone positioning and change position every 1 to 2 hours with the goal of keeping the patient prone as long as possible.
 - i. Use timed position changes; ask the patient to switch positions as follows:
 - 30 minutes to 2 hours lying fully prone (bed flat)
 - 30 minutes to 2 hours lying on right side (bed flat)
 - 30 minutes to 2 hours sitting up (30 to 60 degrees) by adjusting head of bed
 - 30 minutes to 2 hours lying on left side (bed flat)
 - 30 minutes to 2 hours lying prone again
 - Continue to repeat the cycle.
 - f) When not prone, position patient supine, upright 30 to 60 degrees.
4. If oxygen saturations deteriorate:
- a) Ensure oxygen is connected to patient.
 - b) Increase FiO₂ (per facility policy or prescriber's order).
 - c) Change patient position; consider returning to supine position.
 - d) Evaluate the need to escalate to critical care, as appropriate.
5. Discontinue prone positioning if:
- a) No improvement is seen with change of position).
 - b) The patient is unable to tolerate position.
 - c) Respiratory rate increases to 35 breaths/minute or higher; the patient tires, or uses accessory muscles (*NursingCenter*, 2020).

REFERENCES

Prone positioning for the non-intubated patient. (2020, April 9). *MercyOne*

Prone positioning: non-intubated patient with COVID-19 ARDS. (2020, May). *Lippincott NursingCenter*.
<http://www.nursingcenter.com>

RECOMMENDATIONS

Train Super Users (Day and night shift)

- Train a designated Super User that would be able to direct the process of placing a patient in prone position on their respected unit.
- The training would consist of unit specific guidelines for proning a non-intubated patient (Med-Surg/CDU, Telemetry, ICU) and guidelines for proning the intubated patient in the ICU.
- Utilize the standardized guideline approved by the Critical Care department
- The time frame would be to have a trained Super User per shift, per department by early November 2020.

ADDITIONAL RECOMMENDATIONS

- Have a Prone Kit ready in unit specific departments for easy access to required equipment and tools needed to prone a patient.
- Make the “Standardized Guidelines” for “Turning the Intubated and Non- Intubated” patient available for all staff to read via Intranet Page.
- Have staff view the attached video on “Prone Positioning for the COVID-19 Patient” from Mount Sinai Health System.
- Have staff take a Competency Test as proof that they read the “Standardized Guidelines” and viewed the video on “Prone Positioning for the COVID-19 Patient” from Mount Sinai Health System.

“Prone Positioning for the COVID-19 Patient” from Mount Sinai Health System



<https://www.youtube.com/watch?v=ECdxhNFLwVo>

Transcribed Video for a Step By Step Approach: “Prone Positioning for the COVID-19 Patient” from Mount Sinai Health System

1. Need to have a central line and arterial line already in place. Central Line Internal Jugular so that it is easier to maneuver lines.
2. All lines above the waist are heading to the head of the bed. All lines below the waist are down towards the foot of the bed.
3. Tape indwelling catheter to top medial aspect of the thigh to lay on top of leg while prone.
4. Anterior chest tubed patient cannot be proned. Lateral chest tube make sure that the tubes are disconnected from the pleura vac and secured to post lateral chest wall.
5. JP drains secured with abdominal binder with fasteners on the back.
6. All pts will need “Allevyn Foam Dressing” to prevent pressure ulcers
7. Make sure patient has been off 1-2 hours of feeding to prevent Salem feeding suction prior to proning.
8. Make sure pt is hemodynamically stable prior to proning maneuver.
9. Head of bed stabilize pats head like a C-Collar out of your arm to stabilize the back of head down to the top of the shoulders.
10. EKG leads remove

Continued...

**Transcribed Video for a Step By Step Approach:
“Prone Positioning for the COVID-19 Patient” from Mount Sinai Health
System**

After Proning

Mirror image the EKG to the pts back

Tube feedings can begin about 1-2 hours after proning maneuver

Feeding schedule

12 hours during the actual prone

Reglan for all pts

If code occurs

ACLS start prone CPR on the back at the level of the base of the scapula up midline on the thoracic spine. Depth and rate is the same as supine CPR 1st is the chest compression and 2nd person grabs the crash cart

Continued...

Demonstration manual proning using bedsheets

1. 3 sets of bedsheets 6 pillows 3 turners on left and 3 turners on right Respiratory 2. Therapist at the head of bed. Remove unnecessary item then
3. Take 1st bed sheet place it on side of patient left
4. Turn patient on opposite end tuck sheet in
5. Turn patient other side and pull the sheets and spread across
6. Take 2nd bedsheets spread on top and across the patient
7. Ensure there are no wrinkles and sheet is flat
8. Take 2 pillows on the chest and 2 pillows on the shin
9. Take another sheet and place it across the patient
10. Fold sheet inwards toward patients
11. Hold patient sheets
12. Other side fold patient upwards toward patient
13. Count 1-3 move patient to edge of bed
14. Other side push in while other side push up and out to lateral hold patient
15. Check ET tube and lines in place
16. 1-3 patient towards push in and other side pull towards them
17. Adjust pillows and ensure that patient is fully prone
18. Check ET tube for depth lines for security blankets removed and arms adjust 19. Turn head toward the ventilator
20. Reverse Trendelenburg position

Continued...

Swimmers Position

Take pts right hand and place palm facing downward by the face

Turn pts head every 2 hours

1. Take patient out of reverse Trendelenburg
2. Place another bedsheet on top of patient
3. Roll all of the bedsheets to the sides both left and right side of the patient.
4. On the count of 3 Everyone bring patient up towards the head of bed until the patients head is hanging off the edge of the bed while the Respiratory Therapist supports the head.
5. Once pts head is hanging off the edge of bed while the RT is supporting pts head rotate the head while it is hanging at the top of the bed with the respiratory therapist supporting the head
6. While supporting the pts head with both RT hand rotate slowly supporting the ET tube at all times. Once head is rotated inspect the ET Tube for kinks. Ensure all your lines are intact and running.
7. On the count of 3 RT move the patient down in a similar fashion.
8. For patient safety place a c-foam to prevent pressure ulcers

Continued...

How to Unprone patient

1. Ensure patient head is facing side of vent
2. Place a sheet on patients back
3. Team will roll the patient upwards
4. Other side will roll the sheets downwards
5. On the count of 3 patient will be moved towards the edge of beds.
6. Team on the other side will pull pts up while the other team will push the pts down to a lateral position
7. Then the team will completely turn the patient of a count of 3
8. Then the team will ensure the patient is in the center of the bed
9. Then the team will ensure the lines are secured and running.

THANK YOU!