WHAT IS RESPIRATORY FAILURE?



Acute Respiratory Distress Syndrome (ARDS) is a

type of respiratory failure that develops and progresses rapidly. This syndrome causes fluid to fill the lungs, making it difficult or impossible to breathe, thus depriving organs of oxygen needed to function.

BENEFITS OF PRONE POSITIONING

Improvement in oxygenation:

The prone position increases oxygen and carbon dioxide exchange by removing fluid in the alveoli (see picture below).

Reduction of the effects of pressure on the lungs:

The weight of the heart and abdomen on the lungs is reduced in the prone position, allowing for easier lung expansion (breathing).¹ The prone position also allows for pressure from the ventilator to be distributed safely to the lungs, preventing the harmful effects of ventilator-induced lung injury.¹



The primary goal of all interventions and treatments for ARDS is to better understand the best way to improve oxygenation for the patient.

THINGS TO KEEP IN MIND

Edema (swelling) often becomes very noticeable in the face and tongue from prolonged prone positioning.

Skin Breakdown is a common risk factor for patients who are in the prone position in the ICU.

Visibility of the patient may be limited while they are in the Pronova-O₂ Automated Prone Therapy System. Discuss options with your nurse to feel better connected to your loved one during this time.

- Ask questions
- > Journal
- Talk to patient
- Ask the nurse how you can help with any care
- Look for support groups (ARDS Foundation, American Lung Association, etc)

Common conditions that cause ARDS²

- Pneumonia
- Sepsis
- Major Trauma
- > Aspiration of Harmful Substances



We created this resource to help you understand respiratory failure and why your loved one is a candidate for prone positioning.

HOW IT WORKS

The Pronova-O₂ Automated Prone Therapy System was developed with you and your loved one in mind. This system provides an effective and efficient way for clinicians to safely move patients into the prone (face down) position while allowing the patient to continuously rotate from side to side (continuous lateral rotation).



ICU Terms

Arterial Blood Gas (ABG) is a blood test that measures oxygen and carbon dioxide levels in your blood.

Bronchoscopy is a procedure that provides a close look inside the lungs, and allows the physician to suction and test fluid inside the lungs.

SpO₂ (Pulse Oximeter) is a percentage from 0 - 100 that is constantly shown on the monitor. It is a measure of the oxygen saturation in the blood.

Resources:

turnmedical.com

ARDSglobal.org

Myicuguide.com

https://www.thoracic.org/patients/patient-resources/ resources/acute-respiratory-distress-syndrome.pdf https://www.lung.org/lung-health-diseases/lungdisease-lookup/ards/ards-treatment-and-recovery

Facebook:

ARDS Foundation

ARDS Support Page for Survivors and Families of Victims- Information Page

References

1. Albert, R. and Hubmayr, R. (2000). American Journal of Respiratory and Critical Care Medicine, 161. pp 1660-1665. Doi: https://doi.org/10.1164/ajrccm.161.5.9901037

2. ARDS. Mayo Clinic. Retrieved April 9, 2020, from https://www.mayoclinic.org/diseasesconditions/ards/diagnosis-treatment/drc-20355581?p=1





DIGONOVO-02 automated prone therapy system



FAMILY SUPPORT RESOURCE

CLM-003 - Patient & Family Brochure - Rev A