Invasive BiPAP Use to Delay Mechanical Ventilation in COVID-19

Frequently Asked Questions

1. **Describe considerations in using a BiPAP device off-label to treat ARDS caused by COVID-19.**

   We are experiencing a global pandemic that is placing great strain on our medical resources, including hospital beds and the life-supporting devices necessary to prevent death due to ARDS caused by COVID-19. All tools at the disposal of healthcare workers need close investigation as to their utility to stabilize patients and allow adequate resources to be allocated to the gravely ill. Our goal is to provide information to healthcare workers about the use of the BiPAP device after endotracheal intubation.

   HHS and FDA Guidance support the use of the BiPAP device as described in our initiative for invasive ventilation. The American Association for Respiratory Care supports the emergency use of invasive BiPAP for appropriate patients, including some COVID-19 patients. Furthermore, the AARC does not recommend using a mask with these patients given the potential for aerosol formation.

2. **Is a T-piece required for set-up?**

   Basic setups would use either a T-piece, one-way valve or an Omniflex corrugated connector, which can be adapted. A standard endotracheal tube has the appropriate configuration.

3. **What is the proper face mask for a non-intubated patient?** It seems clear that only a full face mask would be useful for a person who previously needed CPAP for obstructive sleep apnea, but then developed respiratory distress.

   The American Association for Respiratory Care recommends AGAINST the use of a face mask with COVID-19 patients.

4. **Is it possible to use a home CPAP or BiPAP?**

   The American Association for Respiratory Care recommends AGAINST the use of home CPAP devices. AARC guidance is that some home BiPAP devices may be used with modification, but we make no recommendation outside of hospital-grade BiPAP devices.

5. **Can home BiPAP devices be donated to hospitals?**

   Home devices may not generate the necessary pressures to ventilate critically ill patients. Hospital-grade devices should be used due to the ability to provide higher pressures and higher concentration of oxygen supplied through the device.

   *Should you experience technical difficulty with any BiPAP device, contact the manufacturer of the device.*

This document is intended for use by healthcare professionals. If you are an individual, call your doctor for medical advice, or if you are experiencing a medical emergency, call the emergency medical services number for your jurisdiction. When contacting Syneos Health, LLC, please do not provide any identifiable patient information or any other protected health information.