Mechanical Ventilation during Patient Transport

Purpose
To continue the same standard of care during patient transports outside of the ICU by simulating ventilation as closely as possible to the ventilation they are receiving in the ICU.

Policy
It is the policy of the Respiratory Care Department to provide ventilation and oxygenation for all mechanically ventilated patients during transport.

Audience
- The ICU therapists are responsible for assisting with the transport of ventilated patients from their units.
- All intubated ICU patients will be transported using a transport ventilator.
- If PEEP is ≤ 8cmH2O and FiO2 ≤50%, a physician order may be obtained for transport via manual resuscitator in situations in which a delay may be incurred and a risk to benefit ratio has been evaluated.

Procedure

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<th>Step</th>
<th>Action</th>
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| 1    | Prepare all necessary equipment and supplies for transport and check for proper function.  
- Transport ventilator with circuit (FiO2 calibration and extended self test completed)  
- LOX canister or E cylinder (greater than 1500 psi)  
- Manual resuscitator and appropriate size mask. (PEEP attachment, if necessary) |
| 2    | Assess patient for tube security and possible need of suctioning. |
| 3    | Transports utilizing the Transport Ventilator:  
Disconnect the patient from mechanical ventilation, put ventilator on stand-by and begin ventilation with transport ventilator to be used during transport.  
- Place the patient on the transport ventilator for at least 10 minutes prior to transport to assess patient tolerance and stability for travel.  
- All mechanically ventilator transports must include a liquid oxygen transport system and a manual resuscitator with appropriate sized mask (PEEP valve if necessary). |
Procedure
Continued

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<th>Step</th>
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<td>4</td>
<td>Transports utilizing the Manual Resuscitator: Attach manual resuscitator to the artificial airway and manually ventilate with 100% oxygen, simulating rate and depth of breaths as close as possible to what the patient has been receiving from the ventilator. Observe patient for tolerance of the change in mode of ventilation.</td>
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<td>After determining that the mode of ventilation being used is tolerated without any adverse effects, transport patient to area required. Continue to monitor patient.</td>
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<td>6</td>
<td>Document all pertinent data regarding transport in Epic including patient tolerance, equipment used, and length of time required for transport. Document per RCS Policy # 7.1.1.</td>
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Infection Control

References
AARC Clinical Practice Guidelines; Transport of the Mechanically Ventilated Patient, Respiratory Care; 1993; 38:1169-1172


Branson RD. Intrahospital Transport of Critically Ill, Mechanically Ventilated Patients. Respiratory Care. 1992; 37:775-93