Transport of Adult Non-Critical Ventilator Dependent Patients

The purpose of this protocol is to establish a uniform procedure for using mechanical ventilation for the transport of patients who are otherwise stable and do not meet criteria for MICU/CCT or Air Medical transport. Typically, respiratory care settings will be established by physicians and administered by registered respiratory therapists. Units transporting patients under this protocol must be equipped with an ALS Agency’s Medical Director approved transport ventilator. Paramedics performing the transports must be trained in the use of the transport ventilator as approved by the Agency’s Medical Director.

Procedure

A. Always keep a bag valve mask resuscitator close by in case of ventilator failure.
B. Verify tube placement with waveform capnography prior to placing the patient on the transport ventilator.
C. Patient lung sounds should be checked and documented. Tube placement must be rechecked via lung sounds and continuous waveform capnography every time the patient is moved, i.e. stretcher to stretcher or in or out of a vehicle.
D. Continuous monitoring with the pulse oximeter and capnography will be used on all patients. If pulse oximetry is not attainable due to poor circulation, ABG or VBG may be used to insure adequate oxygenation. If unavailable, consider MICU/CCT or air medical transport.
E. Ventilator and circuit must be set up according to manufacturer’s recommendations.
F. Patient should be placed on the ALS Agency’s ventilator approximately 5 minutes prior to departure to ensure the patient tolerates the ventilator. Appropriate adjustments should be made prior to departure.
G. Assist Control (AC), and Synchronized Intermittent Mandatory Ventilations (SIMV) are acceptable modes of operation. Set Positive End Expiratory Pressure (PEEP) and Sigh as established by sending facility. PEEP greater than 5 cmH2O should be referred to MICU/CCT or Air Medical Services for transport or appropriate hospital staff must accompany the patient.
H. Patients not tolerating the ventilator should have airway rechecked. If tube placement is confirmed, and the patient is still not tolerating the vent they should be referred to MICU/CCT or Air Medical Services for transport or appropriate hospital staff must accompany the patient. If the patient requires continuous sedation or paralysis during the transport, MICU/CCT or Air Medical transport will be utilized or appropriate hospital staff must accompany the patient.

I. Once the patient is on the ventilator, expiratory volumes must be checked per the sending facility’s orders.

J. Patient’s high and low pressure alarms will be set by taking the peak inspiratory pressure and adding 15 mmHg for the high value and subtracting 10 mmHg for the low value.

K. Patients whose respiratory status is unstable will not be transported by ALS units without accompanying hospital staff or referral to MICU/CCT or air medical services.

L. Patients placed on BiPAP, through the ventilator, as an urgent or emergent intervention should be referred to MICU/CCT or Air Medical services for transport or hospital staff may accompany the patient. BiPAP, through the ventilator, already in place for stable patients in a non-emergent setting, tolerated well by the stable patient, may be transported by ALS.