Mechanical Ventilation Liberation Protocol

PURPOSE:
There will be a formal assessment or screening of readiness for liberation from Mechanical Ventilation performed every morning.

PROCEDURE:
Every day between 0500 - 0630, Respiratory Therapist will screen all mechanically ventilated patients for the following criteria to determine extubation potential.

PATIENT SCREENING:
- FiO2 = 50% and SP02 = 92%
- PEEP <= 8
- PH 7.30 - 7.50
- Hemodynamically stable - no pressors, HR<100, systolic BP <180
- Patient exhibits spontaneous inspiratory efforts
- Patient can be aroused -- Glasgow scale 10 - 15
- Suction requirements < every 2 hours
- Minute ventilation <15 L/m

- Include NIF> -20 cm H2O with patients with neuro involvement

PROTOCOL:
If the patient meets the screening criteria above, a Spontaneous Breathing Trial will be performed using either of the below techniques for 60 minutes. Work with RN to attempt to lighten sedation to bring patient to a RASS scale of 0. RN to monitor patient during 60-minute trial.

Spontaneous Breathing Trial (SBT)
Spontaneous Breathing Trial settings (MV):
- FiO2 same as (mv) mechanical ventilator
- Set CPAP at 5 cm H2O
- Set pressure support at 5
- Order ABG draw 60 minutes from start of trial.

OR
Spontaneous Breathing Trial settings (T-piece):
- Aerosol FiO2 same as ventilator
- Order ABG draw 60 minutes from start of trial.

POINT OF EMPHASIS:
1. If the patient reaches any of the following criteria, the SBT will be terminated, the patient will be returned to their previous ventilator settings, and RT will document on the Daily Assessment Breathing Trial form:
   - RR > 35 b/min for more than 5 min
   - RR < 8
   - SpO2 < 90 for more than 1 min
   - HR > 120 or < 60
   - Systolic Bp > 180 or MAP < 60
   - Subjective evidence of increased work of breathing (e.g., diaphoresis, retraction, accessory muscle use)
   - Cardiac instability or dysrhythmias

2. Prior to extubation, notify physician (CCS) of SBT trial plus ABG result.

References:
8. University of Utah Health Sciences Center, Pulmonary Services, Respiratory Care, February 1997; Section: Clinical; Subject: Ventilator Weaning Protocol NCC.