

GUIDELINE FOR THE WITHDRAWAL OF MECHANICAL VENTILATION/LIFE SUPPORT OF ADULTS USING TERMINAL WEANING

PURPOSE: To promote physical and emotional comfort and support for the adult patient and family when the decision has been made to withdraw mechanical ventilation/life support. For more information see policy #191 – Forgoing Treatment.

CONTENT:

1. The decision to withdraw mechanical ventilation/life support will be a decision made by the patient and/or appropriate surrogate decision-maker(s) in conjunction with the health care team. The organ procurement agency will be contacted by the clinician at this point, if not already done so
2. The requesting physician must enter an order in MIS/patient's record and contact all appropriate health care personnel (inc. nurse, respiratory therapist).
3. It should be determined which members of the family/significant others wish to be present for the withdrawal. Offer to call the chaplain and be prepared to spend time with the family explaining the procedure and providing support.
4. Provide appropriate comfort measures for patient and family such as: keeping patient clean using suction as needed and dark towels if there is bleeding; encouraging family to touch the patient; removing restraints and unnecessary medical equipment;
5. Stop the neuromuscular blocking agents, if they are in use. Respiratory effort is usually the first sign that neuromuscular blocking agent is gone, you may need to adjust the sensitivity and/or decrease the ventilator rate to allow spontaneous ventilation and then assess.
6. Discontinue any unnecessary infusions or any other therapies that do not directly contribute to patient comfort such as antibiotics, diagnostics, vasoactive agents. IV access should be maintained for medications.
7. Administer narcotics or sedatives to eliminate distress assessed by examination and patient response (See **Guideline for Pharmacologic Intervention below**). Administer anticholinergic if appropriate.
8. While observing for signs of distress and providing adequate narcotics to treat distress but not to stop respirations (ventilatory support may need to be continued until narcotics take effect) provide the following actions:
 - a) Decrease FiO₂ to room air and PEEP to 0 CM H₂O. (Many patients die at this point. The physician will pronounce death before the ventilator is discontinued and the patient extubated.)
 - b) Wean ventilator rate to 0 and pressure support to ≤ 5 cm H₂O. (If the patient does not demonstrate spontaneous effort to breathe, decrease the sedatives/narcotics until respiratory effort is noted or the patient shows signs of distress. Ventilator support may need to be increased for a short time for patient comfort while adjusting the narcotics and sedatives.)
 - c) When ventilator rate is 0 and pressure support is 0, extubate. Turn off monitors and alarms (central monitoring is ok)
 - d) Continue to observe and assess patient, providing comfort interventions for patient and family.

**GUIDELINE FOR PHARMACOLOGIC INTERVENTION DURING
TERMINATION OF VENTILATOR SUPPORT FOR ADULTS**

Continue current opioid at present rate
Or
Start opioid infusion and anxiolytic if needed.



Assess after 10 minutes using objective markers -

Upward adjustment needed if:	No upward adjustment needed if:
Signs of dyspnea	RR < 6
RR > 24	HR < 50
Nasal Flaring	MAP < 50
Use of accessory muscles	
HR increase \geq 20%	
MAP increased \geq 20%	
Grimacing, Clutching	
Diaphoresis	

Adjustment needed?



YES	NO
<ul style="list-style-type: none"> • Repeat bolus, increase infusing rate • Reassess after 10 minutes • If adjustment still needed double basal rate and increase infusion rate. Consider use of a benzodiazepine 	<ul style="list-style-type: none"> • Continue at present rate • Continue to reassess regularly.