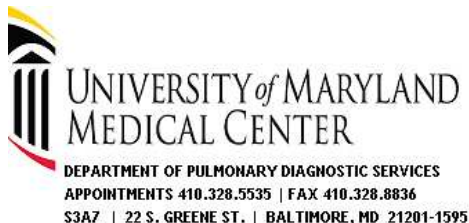
 <p>R ADAMS COWLEY SHOCK TRAUMA CENTER UNIVERSITY OF MARYLAND</p>	Origination:	4/2011
	Effective:	4/2019
	Last Approved:	5/2015, 5/2019
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	Owner:	Dino Gaetani Mgr, Pulmonary Function Shock Trauma Center
	Area:	Shock Trauma Center
Policy Type:	Guideline	
Applicability:	Shock Trauma Center	



INDIRECT CALORIMETRY

RATIONALE:

Indirect Calorimetry is performed to determine resting energy expenditure (REE) and the respiratory quotient (RQ) in mechanically ventilated patients measuring V_{O_2} and V_{CO_2} . This data can be used to customize nutrition support therapy to maximize its benefits.

INDICATIONS:

Indirect Calorimetry is useful in critically ill patients, especially patients with trauma, burns, necrotizing soft tissue infections, obesity, failure-to-wean from ventilator, amputations, spinal cord injury, or failure to respond to nutritional therapies. Coordination with the respiratory therapist, nurse, physician, and dietitian is important.

ASSESSMENTS PRIOR TO SCHEDULING:

- Order for Indirect Calorimetry (Pulmonary Diagnostic Testing)
- $FiO_2 \leq 60\%$
- $PEEP \leq 12$ cmH₂O
- Volume controlled modes preferred on ventilator. Make adjustment for continuous flow modes
- Check for air leaks from ET tube or significant air leak via chest tube
- Metabolic Acidosis not present
- No intermittent hemodialysis during test, use clinical judgment during CVVH

PROCEDURE CHECK LIST:

- Patient should be kept undisturbed, room ambient temperature, and noise level down
- At least 1.5 hours after ventilator changes
- Suction patient 1 hour prior
- 1 hour after major nursing care
- 30-60 minutes after sedatives/analgesics
- At least 2-4 hours after bolus tube feedings or meal if on a PO diet. If continuous tube feeding, do not discontinue.
- 12-24 hours since last intermittent hemodialysis
- Patient hemodynamically stable
-

Co-developed with Department of Clinical Nutrition

*Cardinal Health

*AARC Clinical Practice Guidelines

4/2011 Rev 5/2019
