

DATA COLLECTION FORM

BALLARD™ LIBERATOR ET TUBE CLEARING SYSTEM

Circle Liberator Used:	Liberator 7-7.5 mm	Liberator 8-8.5 mm	Date and Time Intubated:	/ /		AM / PM
Primary Diagnosis:		Mode of ventilation:	Circle Type of Uumidification Used:	HME	НСН	Heated Wire

STEP 1: Suction patient per hospital protocol. If suctioned, allow patient to stabilize before proceeding to Step 2.

STEP 2: Record Pre-ETT cleaning ventilator measurements.

Fill in Blanks For Date & Time:	/ /	AM / PM	/ /	AM / PM	/ /	AM / PM	//	AM / PM
Peak Inspiratory Pressure (PIP) cm H ₂ O								
Airway Resistance (Raw) cm H₂O/L/sec								

STEP 3: Complete ETT cleaning procedure following manufacturer instructions for use. Do not use with tracheostomy tubes or ETTs size <7 or >8.5 mm.

STEP 4: Allow patient to stabilize post-cleaning and then record post-ETT cleaning ventilator measurements.

Fill in Blanks For Date & Time:	/ /	AM / PM						
Peak Inspiratory Pressure (PIP) cm H₂O								
Airway Resistance (Raw) cm $H_2O/L/sec$								

STEP 5: Record the following observations after EFF cleaning (see reverse for key).

Fill in Blanks For Date & Time:	// AM/PM	/ / AM / PM	/ / AM / PM	// AM/PM	
		Please circle the appropriate	e option in each column below		
	< 1 cc	< 1 cc	< 1 cc	< 1 cc	
Amount of secretions removed (estimate)	> 1 cc	> 1 cc	> 1 cc	> 1 cc	
	> 2 cc	> 2 cc	> 2 cc	> 2 cc	
	Clear	Clear	Clear	Clear	
Color of secretions removed	Bloody	Bloody	Bloody	Bloody	
	Other	Other	Other	Other	
	Thin	Thin	Thin	Thin	
Thickness of secretions removed	Tenacious	Tenacious	Tenacious	Tenacious	
Terrioved	Purulent	Purulent	Purulent	Purulent	
Did the patient tolerate the	Yes, better than	Yes, better than	Yes, better than	Yes, better than	
procedure as compared to	Same	Same	Same	Same	
suctioning?	No, worse than	No, worse than	No, worse than	No, worse than	
	Yes, it's better	Yes, it's better	Yes, it's better	Yes, it's better	
Did cleaning the ETT lead to improved patient status?	Unchanged	Unchanged	Unchanged	Unchanged	
improved patient status:	No, it's worse	No, it's worse	No, it's worse	No, it's worse	
	Good	Good	Good	Good	
How would you rate ease of use of the Liberator?	Fair	Fair	Fair	Fair	
	Difficult	Difficult	Difficult	Difficult	
Did the Liberator clear ETT	Yes	Yes	Yes	Yes	
better than suction alone?	No	No	No	No	
(more secretions removed, clinical improvement, etc.)	Not sure	Not sure	Not sure	Not sure	





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Additional data collection space (if needed)

Fill in Blanks For Date & Time:	/ / AM / PM	/ / AM / PM	// AM/PM	/ / AM / PM	
Circle the Appropriate Stage of Use:	Pre / Post Pre / Post		Pre / Post	Pre / Post	
Peak Inspiratory Pressure (PIP) cmH2O	/	/ /		/	
Airway Resistance (Raw) cmH20/L/sec	/	/ /		/	
	< 1 cc	< 1 cc	< 1 cc	< 1 cc	
Amount of secretions removed (estimate)	> 1 cc	> 1 cc	> 1 cc	> 1 cc	
Terrioved (estimate)	> 2 cc	> 2 cc	> 2 cc	> 2 cc	
	Clear	Clear	Clear	Clear	
Color of secretions removed	Bloody	Bloody	Bloody	Bloody	
	Other	Other	Other	Other	
	Thin	Thin	Thin	Thin	
Thickness of secretions removed	Tenacious	Tenacious	Tenacious	Tenacious	
removed	Purulent	Purulent	Purulent	Purulent	
Did the Liberator clear ETT	Yes	Yes	Yes	Yes	
better than suction alone?	No	No	No	No	
(more secretions removed, clinical improvement, etc.)	Not sure	Not sure	Not sure	Not sure	

EXTUBATION DATE/TIME:

ETT APPEARANCE AT EXTUBATION:

ADDITIONAL COMMENTS:

ETT OBSERVATION AND CLEANING KEY

Estimate amount of secretions removed from ETT:

Length of Secretions in ETT (cm)	Volume Results (cc)
1.0	0.5
2.0	1.0
3.0	1.5
4.0	2.0

Thickness of Secretions Removed:

- Thin: mucus is clear and thin.
- **Tenacious:** holding fast, pertaining to secretions that are sticky or adhesive or otherwise tend to hold together, such as mucus and sputum.
- **Purulent:** containing, discharging, or causing the production of pus

