



Case Study #1: VENT

Patient history:

- Admitted to ICU s/p pneumonia w/ 2 failed extubations
- h/o smoking, HBP, mild COPD
- Trached 2 weeks earlier
- Shiley #7 cuffed

Clinical findings:

- Awake, alert, following commands
- HR and SpO₂ are normal
- Hemodynamically stable

Pre-Cuff Deflation:

Settings:

AC/VC
RR = 16 bpm
Vt = 500 mL
PEEP = 5 cmH₂O
FiO₂ = 40

Measurements:

PIP = 25 cmH₂O
RR = 18 bpm
Vte = 500 mL

Post-Cuff Deflation:

Settings:

AC/VC
RR = 16 bpm
Vt = 500 mL
PEEP = 0 cmH₂O
FiO₂ = .40

Measurements:

PIP = 17 cmH₂O
RR = 18 bpm
Vte =

What additional info would you want to know?

Are the pt's vent parameters stable?

Verify & List (review the basic guidelines):

During airway patency assessment – what was the patient's PIP and Vte?

- Cuff Inflated
- Cuff Deflated – *What should the Vte look like?*

What should you adjust on the vent to avoid auto-triggering?

Keep in mind that the Valve in-line is going to affect “flow.”

Notes:





Case Study #2: VENT

Patient history:

- 62 y/o male. s/p intubation for COVID for 45 days; no significant PMH; bedside/perc trach 2 weeks ago.
- Admitted to step-down ICU 3 days earlier.
- Bivona #6, Fome-Cuff

Clinical plan and findings:

- Weaning from the vent
- Trial PMV
- SpO₂ = 96%
- Hemodynamically stable
- No s/s of respiratory distress

Pre-Cuff Deflation:

Settings:

AC/VC
RR = 16 bpm
Vt = 500 mL
PEEP = 5 cmH₂O
FiO₂ = .48

Measurements:

PIP = 25 cmH₂O
RR = 18 bpm
Vte = 499 mL

Is the patient a good candidate?

Provide 3 indications of why or why not:

What additional information would you want to know?

Cuff deflation considerations:

What vent adjustment is recommended before cuff deflation?

With a drop in Vte, what is the minimum amount we need to assure airway patency?

Will the PIP drop? Why?

Notes:

