

Case Presentation

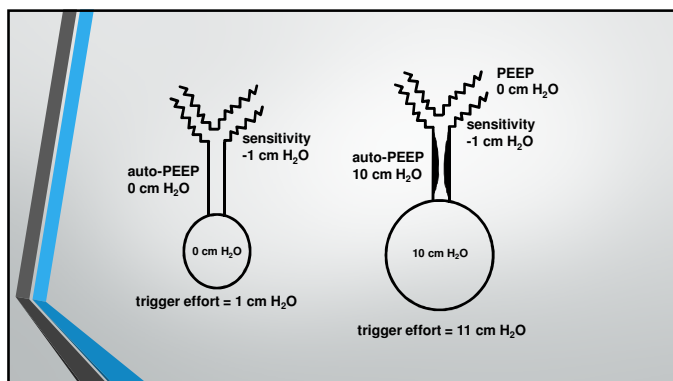
Presented by Dean Hess

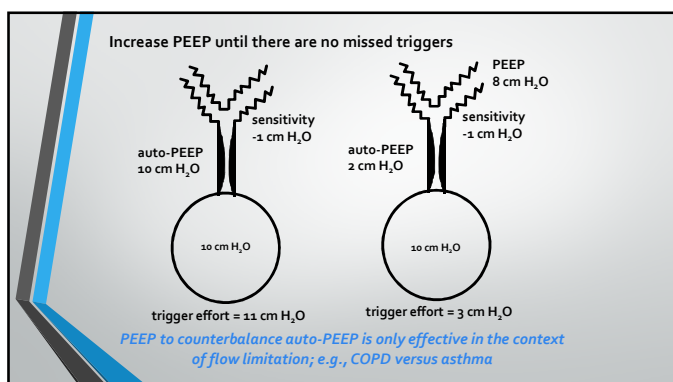
Presentation

- 67-year-old male; 60 pack year smoking history; FEV₁ 40% predicted.
- Presents to ED with increasing dyspnea, ABG pH 7.27, PaCO₂ 80 mm Hg, PaO₂ 50 mm Hg on 2 L/min O₂.
- NIV initiated: IPAP 15 cm H₂O, EPAP 5 cm H₂O, rate 16/min, FIO₂ 0.3.
- Patient respiratory rate 30/min, ventilator response rate 16/min; flow waveform below.

Would you increase the ...

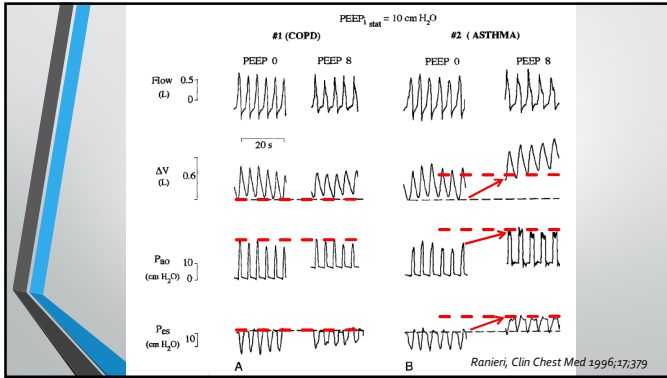
- IPAP?
- Set rate?
- Trigger sensitivity?
- FIO₂?
- EPAP?

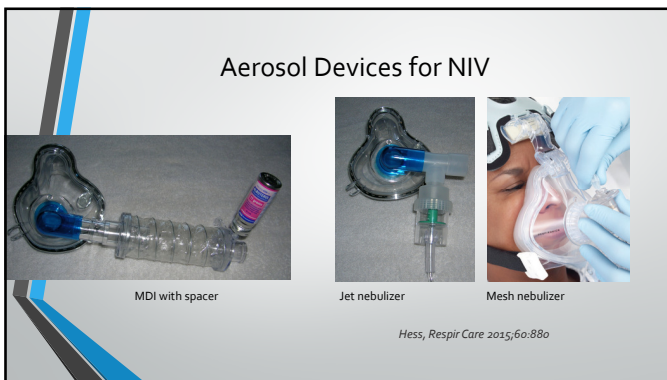




Clinical Approach to Auto-PEEP

- Add PEEP (EPAP) to counterbalance auto-PEEP.
- Reduce minute ventilation.
- Treat lung function: bronchodilators, steroids, airway clearance.





Summary: It Takes a Team

- **Nurse:** Spends most time at bedside; often first to recognize poor patient ventilator interaction.
- **Respiratory Therapist:** Confirms RN observations, makes appropriate adjustments to the ventilator, and administers bronchodilators; RT autonomy improves timeliness of interventions.
- **Physician:** Confirms observations of RN and RT, may make additional suggestions for interventions, assures that there are appropriate orders and prescriptions to address the clinical problem.
