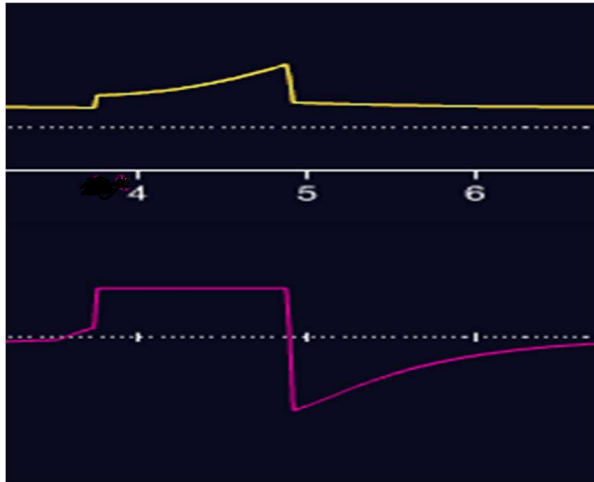




## Ventilator Waveforms

1) In the figure below a patient on the volume-controlled mode with constant flow and PEEP of 12 cmH<sub>2</sub>O, what is the Stress Index?

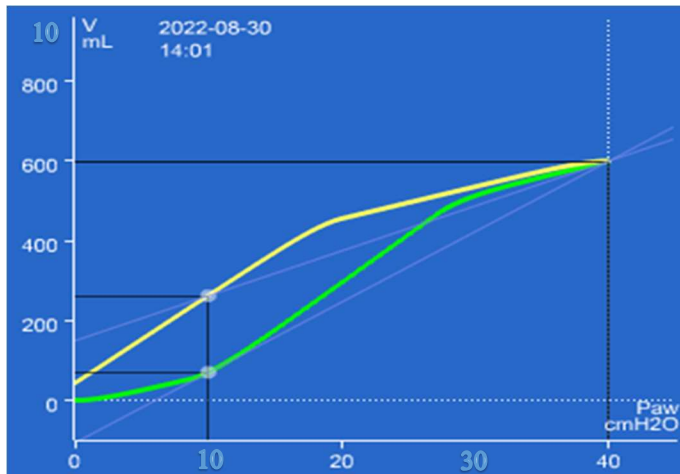


- A)  $< 1$
- B) 1
- C)  $> 1$

2) What would you do to the PEEP level?

- A) Increase PEEP
- B) Decrease PEEP
- C) No change
- D) Not enough information

3) The Pressure-Volume curve below, how much PEEP would you apply?

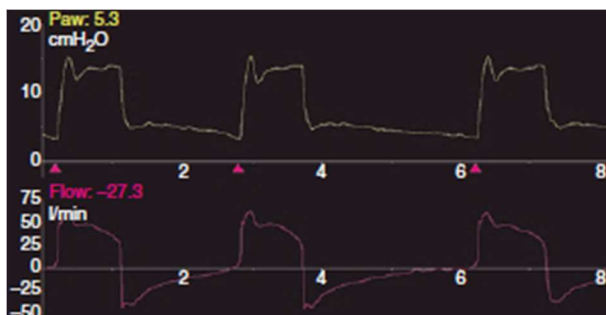


- A) 0 cmH<sub>2</sub>O
- B) 5 cmH<sub>2</sub>O
- C) 10 cmH<sub>2</sub>O
- D) 15 cmH<sub>2</sub>O

4) In the same patient, the Driving Pressure should be less than?

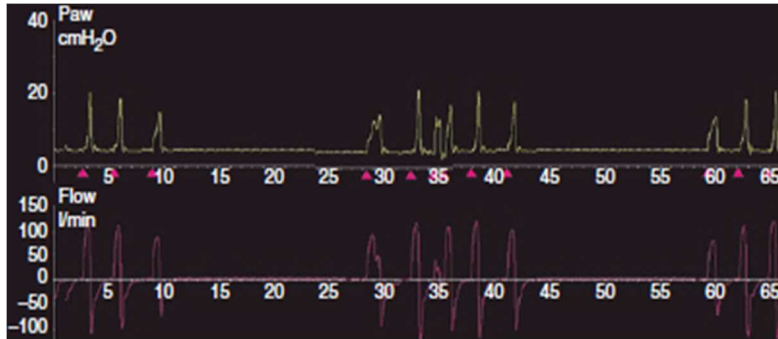
- A) 20 cmH<sub>2</sub>O
- B) 30 cmH<sub>2</sub>O
- C) 40 cmH<sub>2</sub>O

5) Pressure and Flow overshoot seen in the figure below could be secondary to?



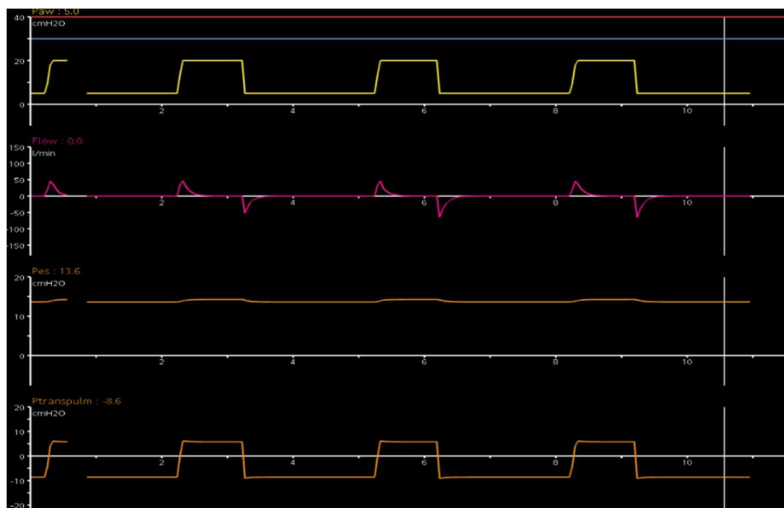
- A) High pressure support levels
- B) Very short rise time
- C) Restrictive lung disease
- D) All of the above

6) In the figure below, what kind of respiratory pattern is shown?



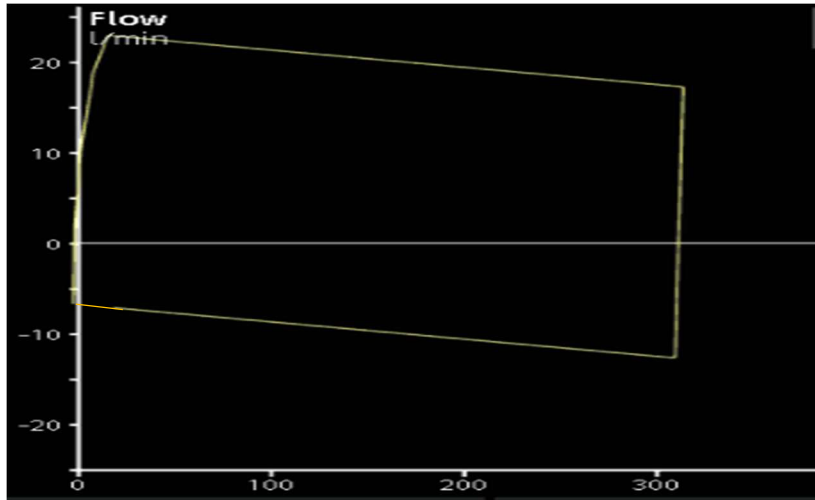
- A) Kussmaul breathing
- B) Cheyne-Stokes Respiration
- C) Auto trigger
- D) Tachypnea

7) In the figure below showing the airway pressure (1<sup>st</sup> yellow), flow (2<sup>nd</sup> pink), pleural pressure (3<sup>rd</sup> orange), and transpulmonary pressure (4<sup>th</sup> orange), PEEP level should be?



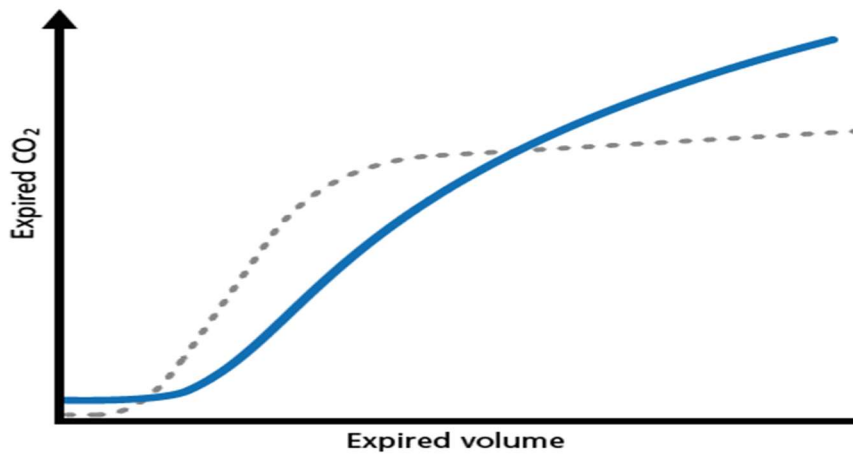
- A) Increased
- B) Decreased
- C) Unchanged
- D) Not enough information

8) The Flow-Volume curve below shows signs of:



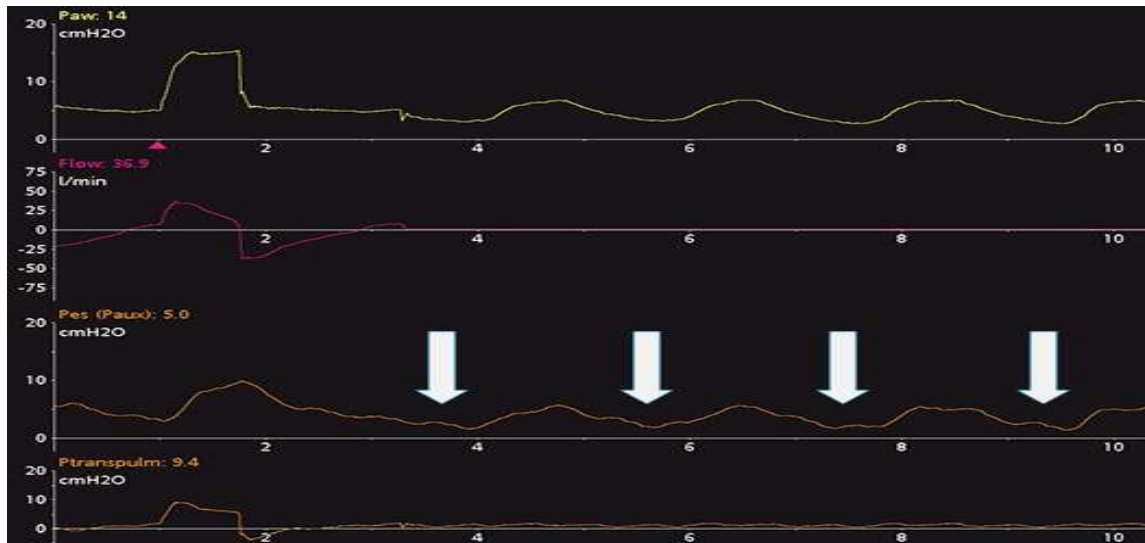
- A) Delay trigger
- B) Auto-PEEP
- C) Air-leak

9) The volumetric capnography figure below shows a normal (dotted grey line), the blue line most probably describes what condition?



- A) ARDS
- B) COPD
- C) Normal
- D) Artifact

10) In the figure below showing the airway pressure (1st yellow), flow (2nd pink), pleural pressure (3rd orange), and transpulmonary pressure (4th orange). The white arrows point to?



- A) Ineffective effort
- B) Expiratory pause
- C) Inspiratory pause
- D) A & B