SELF-ASSESSMENT QUESTIONS
EDIC-style Type K (11)

Q1. Invasive ventilation includes:

- A. All positive pressure ventilation
- B. Ventilation using an endotracheal tube
- C. CPAP using a tracheostomy tube
- D. CPAP using mask ventilation

Q2. Initiation of a breath cycle:

- A. Must be started by a patient-initiated inspiratory effort
- B. Will always be aborted by a patient-initiated inspiratory effort
- C. Machine initiated breath are started on a time cycled basis
- D. It is not possible to mix machine initiated and patient-initiated breaths.

Q3. Usual ways to detect patient-initiated inspiratory efforts include:

- A. By a pressure drop in the ventilator circuit
- B. By a sudden increase in airway resistance
- C. By an inspiratory flow detected in the ventilator circuit
- D. By a decrease in airway compliance

Q4. In volume-controlled ventilation

- A. Tidal volume is given according to a pre-set volume target
- B. If the inspiratory time is fixed, the peak and mean airway pressure is independent of pulmonary compliance
- C. If the minute volume and frequency is set, it is not possible to adjust the VT
- D. If tidal volume and minute volume is set, the ventilator frequency must be set between 10 and 20 breaths per minute

Q5. Which is/are correct statements regarding the inspiratory time (Ti)

- A. At the end-inspiratory time, the expiration phase always starts
- B. If Ti is set by the Inspiration:Expiration ratio, the Ti is independent of ventilator frequency
- C. If Ti is directly set, the expiratory time decreases with increasing vent. frequency
- D. Normal Ti is in the range of 3–4 sec

Q6. In biphasic positive airway pressure (BIPAP):

- A. The ventilator generates a dual CPAP level with an upper and lower pressure set by the user
- B. Patients may freely breath spontaneously in the low pressure phase only
- C. Patients are allowed to exhale even during the high pressure phase
- D. Airway Pressure Release Ventilation is an extreme concept of BIPAP with a very short low pressure phase

Q7. When a Heat and Moisture Exchanger (HME) is utilised during IPPV, it

- A. Must be mounted in the inspiratory line to be efficient
- B. Will increase apparatus resistance
- C. Should be avoided/removed in patients with severe impairment of CO2
- elimination
- D. Will have no influence on apparatus deadspace

Q8. Ventilation-induced lung injury may be minimised by the following:

- A. Volume-controlled ventilation mode
- B. Tidal Volume restriction to 6 ml/kg
- C. Limit plateau pressure below 30cmH2O
- D. Limitation of PEEP below 5 cmH2O

Q9. Regarding the I:E ratio

- A. Is normal set between 1:3 and 1:4
- B. Should be lowered to decrease intrinsic PEEP
- C. Increase I:E ratio may improve alveolar recruitment and oxygenation in ARDS
- D. Adjustment of I:E ratio must be matched with respiratory frequency

Q10. The effects of PEEP on improved oxygenation can be explained by:

- A. Re-opening of collapsed alveoli
- B. Increased FiO2
- C. Increased functional residual capacity
- D. Decreased static compliance

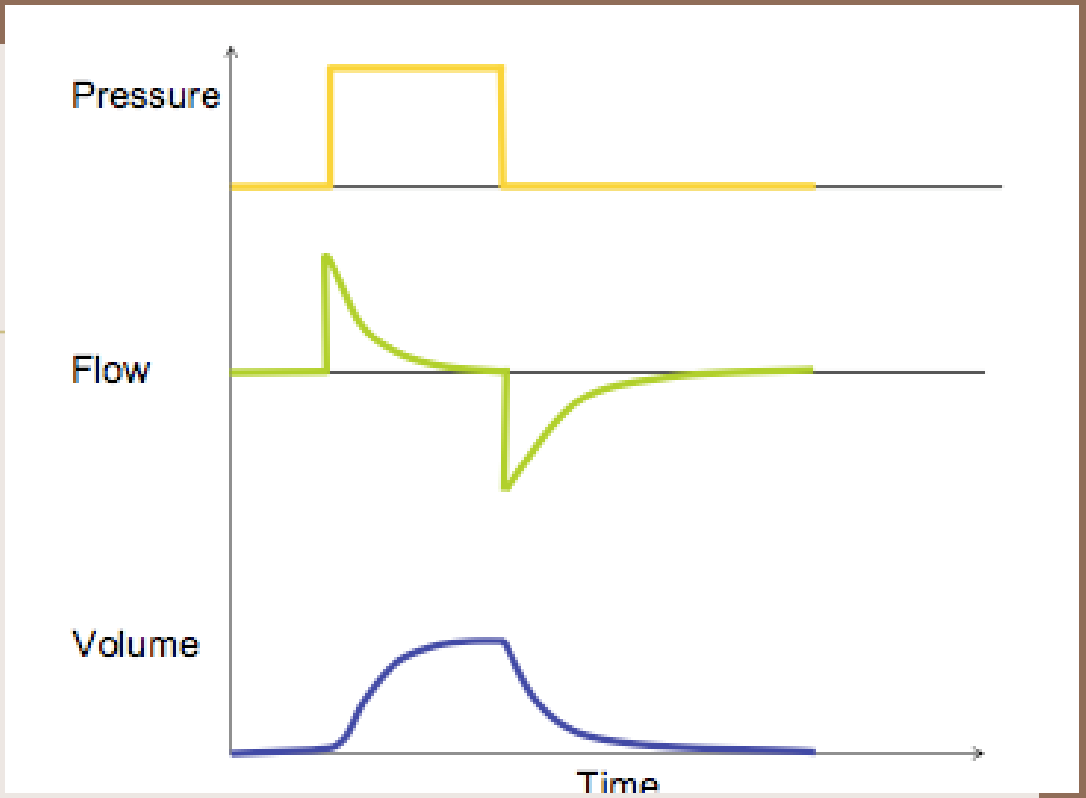
Q11. Various methods to set optimal PEEP at the bedside include:

- A. Arterial PaO2
- B. Analysis of the pressure-volume curve (lower inflection point)
- C. Recording of the oesophageal pressure to estimate transpulmonary pressure
- D. Measurement of end-expiratory lung volume variations

Q12. Disadvantages of endotracheal intubation includes all of the following, EXCEPT

Only one answer correct

- A. Loss of the protective function of the upper airway
- B. Loss of phonation
- C. Decreased airway resistance
- D. Damage to the subglottic area
- E. Need for sedation and or analgesia



Q13. The figure shows

- A. Volume-controlled ventilation
- B. Pressure assisted spontaneous breathing
- C. Volume-assisted spontaneous breathing
- D. Bilevel Positive Airway Pressure Vent
- E. Pressure-controlled ventilation

Q14. Effective methods to decrease an elevated PaCO2 may include all of the following EXCEPT:

- A. Increase tidal volume
- B. Increase frequency
- C. Decrease circuit dead space
- D. Increase PEEP
- E. Increase inspiratory pressure

Q15. Adverse effects of PEEP include the following EXCEPT:

- A. Over distension of normal alveoli
- B. Barotrauma
- C. Decreased cardiac output
- D. Increased intracranial pressure
- E. Increased cyclic collapse of unstable alveoli

Q16. To increase oxygenation during IPPV all of the following are useful EXCEPT:

- A. Increase FiO2
- B. Increase PEEP
- C. Decrease I:E ratio
- D. Increase peak inspiratory pressure
- E. Alveolar recruitment

Απαντήσεις ερωτήσεων
(από το αντίστοιχο module του PACT)

Οι ερωτήσεις Q1 μέχρι Q11 είναι "type K" με βάση τον χαρακτηρισμό του EDIC (European Diploma of Intensive Care) δηλαδή σε κάθε ερώτηση απαντάμε είτε Σωστό (T =true) είτε Λάθος (F=false)

Οι ερωτήσεις Q12 μέχρι Q16 είναι "type A" με βάση τον χαρακτηρισμό του EDIC δηλαδή μόνο μια από τις απαντήσεις είναι σωστή

Q1.	Q2.	Q3.	Q4.	Q5.
A. F	A. F	A. T	A. T	A. F
B. T	B. F	B. F	B. F	B. F
C. T	C. T	C. T	C. T	C. T
D. F	D. F	D. F	D. F	D. F

Q6.	Q7.	Q8.	Q9.	Q10.	Q.11
A. T B. F C. T D. T	A. F B. T C. T D. F	A. F B. T C. T D. F	A. F B. T C. T D. T	A. T B. F C. T D. F	A. T B. T C. T D. T

Q 12	Q 13	Q 14	Q 15	Q 16
C	**E**	**D**	**E**	**C**