Questions and Answers: Part 1
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INTRODUCTION
This site was created in order to stress your brain for a few minutes (3 questions) while surfing by. Every once in a while we will update this section with new questions and answers. This will give you the opportunity to check your knowledge in different anesthesiologic fields. If you would like to be informed whenever we update this section please subscribe for free as reader of The Internet Journal of Anesthesiology.

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QUESTION 1
What are the normal (adults) values for:
1. RV (Residual Volume)
2. IC (Inspiratory Capacity)
3. FRC (Functional Residual Capacity)
4. VC (Vital Capacity)
5. CT (Total Compliance)

QUESTION 2
You have to administer anesthesia to a patient with liver disease and ascites. You would like to use pancuronium as muscle relaxant drug. What are your considerations concerning
- initial dosage of pancuronium and,
- maintainance dosage of pancuronium

QUESTION 3
What kind of cardiac arrhythmia is recorded on the ECG?

ANSWERS

ANSWER TO QUESTION 1
RV = 1500 cc
IC = 3500 cc
FRC = 2500 cc
VC = 4500 cc
CT = 100 cc/mbar or 0.1 L/cm H2O

Figure 3

The relationship between the pressure gradient and the resultant volume increase of the lungs and thorax is known as total compliance CT. Compliance of lungs (CL) and chest wall (CCW) and their relation to CT are expressed in the equation:

\[ \frac{1}{CT} = \frac{1}{CL} + \frac{1}{CCW} \]

Normally, CL and CCW each equal 0.2 L/cm H2O; thus, CT = 0.1 L/cm H2O

**ANSWER TO QUESTION 2**

1. You will need to administer a larger initial dose than usual because of the larger distribution volume (ascites) for the hydrophile pancuronium.

2. You will need to administer a smaller maintenance dose than usual because of the prolonged action of pancuronium in patients with liver disease.

**ANSWER TO QUESTION 3**

The diagnosis is:

1. A slow rate atrial flutter with variable block.

2. The slow rate is suggestive of sick sinus syndrome or drug effect (i.e., quinidine)

**References**
Author Information

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