
Questions and Answers

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Abstract

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.

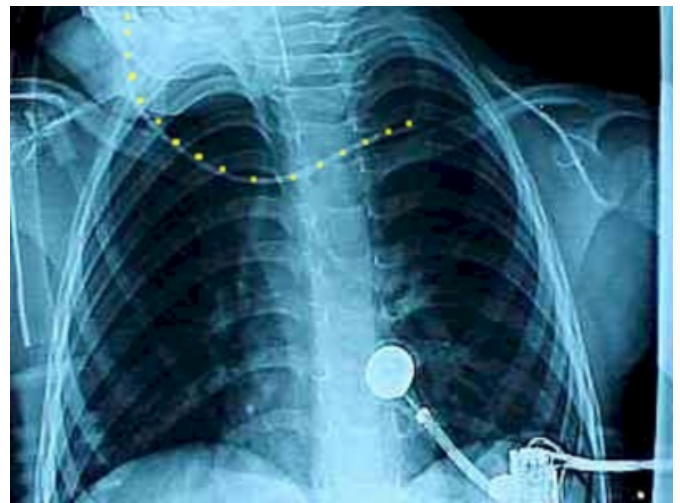
DISCLAIMER

One should keep in mind that the current opinion in Europe may differ from the one in Australia or in the U.S. Having an international readership, it might be difficult to satisfy everybody with the given answers or the suggestions for additional reading. In order to assure the accuracy of this section, all the questions and especially the answers will be reviewed by several international members of the editorial board. Nevertheless, it is difficult to ensure that all the information given is entirely accurate for all circumstances. The publishers disclaim any liability, loss, or damage occurred as consequence, directly or indirectly, of the use and application of any of the content of this section.

QUESTION 1

Figure 1

The tip of the central venous catheter is in the left subclavian vein.



QUESTION 2

What is halothane hepatitis ?

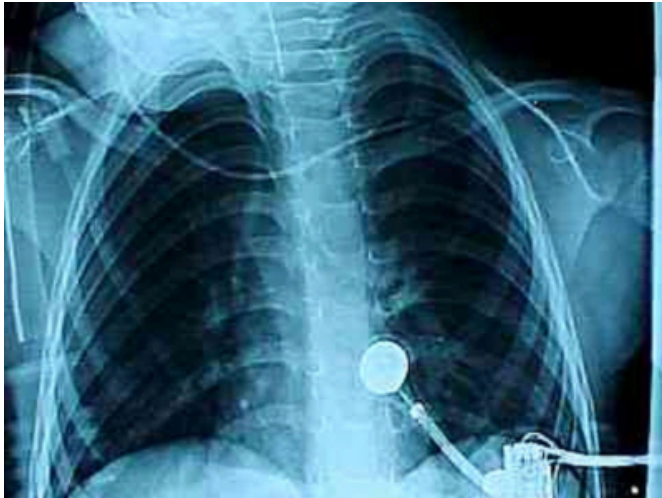
QUESTION 3

What is the difference between VCV and PCV in the ventilation of a patient ?

ANSWER 1

Figure 2

What's wrong in this picture (besides that the patient is rotated)?



The feeding tube is placed in the right mainstem bronchus.

ANSWER 2

Fulminant hepatic necrosis following halothane anesthesia (halothane hepatitis) occurs in one of 6,000 to 35,000 cases and is often fatal. Halothane hepatitis is probably caused by trifluoroacetyl-containing metabolites binding to protein and subsequently forming anti-trifluoroacetyl protein antibodies. During re-exposure of the patient with halothane these

antibodies may mediate massive hepatic necrosis. Other agents such as enflurane, isoflurane and desflurane have been associated with immune-based hepatitis. Because the metabolism of enflurane, isoflurane or desflurane is much less than the one of halothane, fulminant hepatic necrosis occurs to a much lesser extent. Sevoflurane does not form such proteins and does therefore not cause hepatic toxicity.

ANSWER 3

VCV = Volume Controlled Ventilation

PCV = Pressure Controlled Ventilation

VCV is a ventilation mode with a set tidal volume. It is the ventilation mode mostly used in the operating room. The tidal volume will be delivered independent of the pressure (up to the setting of the pressure relief valve). The danger of VCV is barotrauma in patients at risk (i.e. patients with ARDS or COPD).

PCV is a ventilation mode with a set maximal peak airway pressure. It might be used in patients with diseases such as ARDS or bronchopleural fistula. The danger of PCV is decreased minute ventilation during episodes of high airway pressures (asthma, obstruction of endotracheal tube,...).

References

Author Information