The Hong Kong College of Anaesthesiologists

Intermediate Fellowship Examination

Written Paper in Pharmacology

Friday, 24 June 2005, 14:00 - 16:00 h

Answer ALL questions

1. Define bioavailability. Describe the factors which influence bioavailability.

2. Outline the pharmacodynamic effects of β-adrenoceptor antagonists.

3. Describe briefly the adverse effects of etomidate.

4. Briefly describe the potential interactions between inhalational anaesthetic agents and carbon dioxide absorbents.

5. Why are additive drugs used in conjunction with local anaesthetic agents? Illustrate your answer with four (4) examples of these additive drugs. Briefly explain how they work.

6. Define pharmacogenetics. How could genetic factors influence the metabolism of suxamethonium?

7. Classify the antiplatelet drugs, indicating the differences in their mode of actions, provide examples in your answer.

8. Compare and contrast the pharmacology of atropine and glycopyrrolate.

9. Outline the factors that determine the onset of analgesia after an intravenous bolus of opioid. How do alfentanil and fentanyl differ in this regard?

10. Define the “power” of a statistical test. In a clinical trial, Student’s t test was used to compare the mean arterial pressure after intravenous injection of two anaesthetic drugs. How could the power be improved?

11. Discuss the role of dexamethasone for the prevention of postoperative nausea and vomiting.

12. Compare and contrast the different vasoconstrictors used for the treatment of hypotension after subarachnoid block.

******** END OF PAPER ********