



The Hong Kong College of Anaesthesiologists

Intermediate Fellowship Examination

Written Paper in Pharmacology

Friday, 10 Feb 2006, 14:00 - 16:00 h

Answer **ALL** questions

1. What factors influence your choice of drugs for producing muscle relaxation during surgery?
2. What are the important differences between paracetamol and aspirin? When would you favour the use of aspirin over paracetamol?
3. Describe the cardiac effects of local anaesthetics. Why would lignocaine be considered as less cardiotoxic compared with bupivacaine?
4. Classify the drugs for treating myocardial ischaemia, give examples of each class. Indicate their cellular mechanisms of action.
5. Classify the agents commonly used for the treatment of epilepsy according to their mechanisms of action. What drug interactions and adverse effects could you encounter during an anaesthetic for a patient on treatment for epilepsy?
6. What are the advantages and disadvantages of total intravenous anaesthesia (TIVA) compared with a volatile technique? What pharmacokinetic properties make a drug suitable for use in TIVA?
7. Outline the steps that you would take to set up a clinical trial in order to evaluate a new anaesthetic agent.
8. How does desflurane compare with your idea of an ideal anesthetic agent?
9. Describe the mechanisms by which diuretics may alter the renal excretion of potassium.
10. What are the pharmacodynamic effects of midazolam? Describe the factors that may modify drug response after an oral dose of midazolam.
11. What processes are involved in the biotransformation of drugs? Describe the factors that may affect the activity of these processes.
12. Describe the non-analgesic effects of morphine given epidurally.

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