



The Hong Kong College of Anaesthesiologists

Intermediate Fellowship Examination

Written Paper in Pharmacology

Friday, 9 July 1999, 14:00 – 16:00 h

Answer ALL questions

1. Describe the pharmacology of ephedrine.
2. Discuss the cardiovascular effects of desflurane.
3. Describe the relationship between structure and activity of amide local anaesthetics with particular reference to ropivacaine.
4. What are the potential hazards of antibiotic administration during perioperative period?
5. Define tachyphylaxis and tolerance, explain why they may occur and give one example of each relevant to anaesthesia.
6. Outline the pharmacology of ketamine.
7. Briefly describe the factors that may modify the clinical effect of an oral dose of morphine.
8. Outline the potential drug interactions between magnesium sulphate and drugs used in anaesthesia?
9. Compare and contrast the clinical pharmacology of edrophonium and neostigmine.
10. Define the term antagonist. Explain the mechanisms of drug antagonism. Use graphs to illustrate your answer.
11. Describe briefly the pharmacology of inhaled nitric oxide.
12. In a clinical trial comparing two independent groups of subjects, how would you determine the optimal sample size? What are the reasons for calculating the sample size?