



The Hong Kong College of Anaesthesiologists

Intermediate Fellowship Examination

Written Paper in Pharmacology

Friday, 7 July 2006, 14:00 - 16:00 h

Answer ALL questions

1. List the potential adverse effects of propofol infusion. How might modification of drug formulation reduce these adverse effects?
2. Briefly describe the adverse effects of tramadol, including potential drug interactions.
3. Outline the pharmacological techniques that can be used to prevent postoperative nausea and vomiting.
4. In a randomized clinical trial comparing the effectiveness of a new antiemetic X with control, what does the term "Number Needed-to-Treat (NNT)" mean? What are the benefits and limitations of reporting NNT?
5. Outline the factors that affect the onset of action of neuromuscular blocking agents.
6. Classify antidepressants. Outline the interactions between antidepressants and drugs that are commonly used during the perioperative period.
7. Which cellular receptors are involved in neurotransmission of the autonomic nervous system? How does signal transduction occur at the post-ganglionic sites?
8. Outline the factors that determine the toxicity of local anaesthetics.
9. Compare and contrast the pharmacology of gelatine based colloid solutions and hydroxyethylstarch.
10. How does neonatal pharmacokinetics differ from that seen in an adult?
11. Write short notes on the pharmacodynamic effects of nitrous oxide.
12. Describe the cardiovascular effects of non-steroidal anti-inflammatory drugs. What are the mechanisms by which these effects might occur?

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