

## 一、請就下列短文回答問題：

**Drug-Induced Hiccups**

Hiccups may be drug-related in rare cases. Causality can be difficult to assess because patients often have medical disorders that can cause hiccups. As a complication of cancer chemotherapy (eg, cisplatin and anthracyclines), hiccups occur primarily in men. They commonly occur during general anesthesia. The most frequently implicated therapeutic classes are the corticosteroids, benzodiazepines, and dopaminergic agonists (including amantadine). Other therapeutic classes for which more than one agent has been implicated include: barbiturates; opiates; antibiotics (macrolides, quinolones, beta-lactam); anticonvulsants (ethosuximide, lamotrigine, oxcarbazepine); antivirals (cidofovir, delavirdine, ritonavir); triptans and dihydroergotamine; antidepressants (serotonin reuptake inhibitors, mirtazapine, and nefazodone); cholinergic agents (pilocarpine and cevimeline); atypical antipsychotics (olanzapine and quetiapine); Class IB antiarrhythmics (mexiletine and tocainide); proton pump inhibitors; and nicotine.

In theory, corticosteroids and megestrol may induce hiccups by lowering the threshold for synaptic transmission in the midbrain. Some agents could affect the hiccup center via effects on GABA transmission in the CNS (benzodiazepines, felbamate, flumazenil, gabapentin, tiagabine, topiramate, zaleplon, and zolpidem). Others may act within the GI tract. Nicotine may stimulate gastric receptors. One case of intractable hiccups was reported in a child with ceftriaxone-induced pseudolithiasis. Another was related to an esophageal ulcer caused by doxycycline. But many other agents have no proposed mechanism, and hiccups could be attributed to them by chance: amiloride, amifostine, amphotericin, beta interferon, carisoprodol, choriogonadotropin, cyclosporine, doxapram, dronabinol, galantamine, leuprolide, loratadine, ondansetron, propofol, and riluzole.

1. 請將此短文翻譯成中文。(15%)
2. 請就 corticosteroids、benzodiazepines、dopaminergic agonists、opiates、macrolides、quinolones、triptans、serotonin reuptake inhibitors、proton pump inhibitors、benzodiazepines 等十類藥品，各列舉藥品例（以藥品學名表示）至少一例，並分別說明各藥品之適應症、可能之不良反應、使用注意事項、療效監測指標及病患教育內容。(35%)

接背面

二. The World Health Organization (WHO) has defined an adverse drug reaction as "any response to a drug which is noxious, unintended and occurs at doses used in man for prophylaxis, diagnosis or therapy". Please translate the definition into Chinese. Classify ADRs and compare between them. (20%)

三. Translate the article into Chinese. (15%)

Drug-drug interactions represent a difficult dilemma for the pharmacist. Although there are more than 200 individual drug interactions that have caused adverse effects in humans, most of these interactions cause problems only under certain circumstances. Thus, one must be alert for those situations in which the patient is truly at risk, without overreacting every time a patient receives a potentially interacting combination of drugs. Unfortunately, it is not possible for the pharmacist to remember all of the necessary details for each of the drug interactions that have produced clinically important adverse effects. Nevertheless, knowledge of the general principles of drug interactions can enable one to predict some adverse drug interactions before they occur and assess their clinical impact.

四. Match the following questions and answers regarding to surgical antibiotic prophylaxis. You gain 5 points for each correct match. If your answer is incorrect, you will lose 10 points. If you leave the answer blank, you lose 5 points.

Question A

Sherry is to undergo colonic surgery. What form of antibiotic prophylaxis might be employed? The answer is \_\_\_\_\_.

Question B

Lisa is admitted to hospital for total hip joint replacement. What perioperative measures might be employed to prevent postoperative infection?

The answer is \_\_\_\_\_.

Question C

Tom is a surgeon preparing an antibiotic policy for cardiac surgery. What antibiotic regimens might be employed? The answer is \_\_\_\_\_.

*Answer 1.* This surgery carries a high risk of postoperative infection due to mixed aerobic and anaerobic bowel organisms. A broad-spectrum cephalosporin together

with metronidazol are commonly given intravenously.

*Answer 2.* This surgery is regarded as a clean procedure with an intrinsically low incidence of infection. However, some types of organisms are involved including staphylococci, coliforms and anaerobes. A 48-hour course of second generation cephalosporins or the combination of an aminoglycoside are used.

*Answer 3.* Postoperative infection rate is high and fatal. Staphylococci are the predominant pathogens and antistaphylococcal penicillins have been widely used alone or combined with aminoglycoside.

