QUESTIONS ON THE PRESENTATION

"Valproate Case 1 Pharmacokinetics" (2-12-16). Please select the single best choice.

1. The pharmacokinetics of valproate includes studying its mechanism of action as an anticonvulsant:

   A. True

   B. False

2. Regarding valproate metabolism:

   A. In low doses, β-oxidation may be the most important pathway.

   B. In high doses, glucuronidation may be the most important pathway.

   C. Several CYPs contribute in a relatively minor way to valproate metabolism.

   D. All of the above are correct.

3. Regarding the effects of carbamazepine on valproate pharmacokinetics:

   A. Carbamazepine tends to decrease valproate metabolism.

   B. Adding carbamazepine may decrease total valproate concentration but increase free ones.

   C. The discontinuation of carbamazepine will have no influence on valproate metabolism.

   D. All of the above are correct.

4. The combination of lithium and valproate may increase the risk for neurological adverse drug reactions by pharmacodynamic mechanisms:

   A. True

   B. False

5. Regarding valproate toxicity:

   A. Tremor can be a sign of toxicity.

   B. A normal total serum valproate concentration will not rule out valproate toxicity.

   C. You may need to consider measuring free concentrations if total concentrations are within normal limits.

   D. All of the above are correct.

6. Regarding protein binding:

A. Carbamazepine and valproate are drugs highly bound to albumin and other serum proteins; occasionally this may have clinical relevance for drug-drug interactions.

B. The drug fraction bound to the protein is not active while the free fraction is active.

C. High serum concentration of endogenous substances (e.g., uremia or hyperbilirubinemia) can displace drugs from serum proteins.

D. All of the above are correct.

7. Regarding pharmacokinetic drug-drug interactions between aspirin and valproate:

A. Aspirin can inhibit valproate β-oxidation.

B. Aspirin can increase serum valproate free concentration.

C. Valproate is highly protein-bound, but the percentage of valproate bound to albumin and other serum proteins changes with valproate dose.

D. All of the above are correct.

8. Valproate can cause clinically relevant inhibition of several enzymes and decrease the metabolism of carbamazepine, lamotrigine and lorazepam.

A. True

B. False

9. Protein binding may cause relevant drug-drug interactions with valproate.

A. True

B. False

10. Valproate can contribute to Stevens-Johnson syndrome by decreasing lamotrigine metabolism. Therefore, you need to start with lower lamotrigine doses in patients taking valproate.

A. True

B. False