

## PHARMACOLOGY - ANTIARRHYTHMICS MCQ answers

1. Class 1B anti arrhythmic agents
  - A: prolong action potential duration and dissociate from the Na<sup>+</sup> channel with intermediate kinetics
  - B: prolong action potential duration and dissociate from the Na<sup>+</sup> channel with rapid kinetics
  - C: shorten action potential duration and dissociate from the Na<sup>+</sup> channel with intermediate kinetics
  - D: shorten action potential duration + dissociate from the Na<sup>+</sup> receptor with rapid kinetics ✓
  
2. Procainamide
  - A: has little effect on the sinoatrial node
  - B: has nonspecific blockade of K<sup>+</sup> channels ✓
  - C: is less effective on Na<sup>+</sup> channels in depolarised cells
  - D: shortens QRS complex duration
  
3. Donald has ordered some anti-COVID supplies online. He has ingested a box of quinidine and has ECG changes **and**
  - A: acute homeless
  - B: arthralgia, rash and pericarditis
  - C: headache, dizziness and tinnitus ✓
  - D: seizures
  
4. Which patients should not use flecainide to treat paroxysmal atrial fibrillation?
  - A: Those anti-coagulated with warfarin
  - B: Those taking beta blockers
  - C: Those with previous myocardial infarction ✓
  - D: Those with type 2 diabetes
  
5. The cardiovascular effects of amiodarone include
  - A: positive inotropy
  - B: QT prolongation ✓
  - C: weak adrenergic agonist activity
  - D: widened QRS
  
6. Pulmonary toxicity from amiodarone is
  - A: dose related ✓
  - B: due to Ca<sup>++</sup> channel activation
  - C: due to hypersensitivity
  - D: reversible

7. Sotalol

- A: blocks Na<sup>+</sup> channels in depolarised cells
- B: has active metabolites
- C: has cardioselective beta-adrenergic blocking activity
- D: prolongs the refractory period of depolarised and non depolarised cells ✓

8. Verapamil blocks

- A: active and inactive L type Ca<sup>++</sup> channels ✓
- B: active and inactive T type Ca<sup>++</sup> channels
- C: K<sup>+</sup> channels
- D: L and T type Ca<sup>++</sup> channels

9. You are about to give a patient adenosine, which has unpleasant side effects. Its half-life of action will be less than

- A: 10 seconds ✓
- B: 1 minute
- C: 10 minutes
- D: 1 hour

10: Digoxin has many interesting cardiac effects including

- A: faster sinoatrial node discharge
- B: increased conduction velocity of the Purkinje system
- C: lengthened refractory period of the atrioventricular node ✓
- D: QT prolongation