**EmergiPress CE Test – December 2023**

1. Paramedics respond to a 24 year old male exposed to a toxic pesticide. He is diaphoretic and in respiratory distress with significant airway secretions. He is incontinent, vomiting, and is noted to have pinpoint pupils. What toxidrome is described?
   1. Anticholinergic
   2. Cholinergic
   3. Empathomimetic
   4. Sympathomimetic

**Answer: b**

The symptoms are consistent with DUMBELS, cholinergic toxidrome that can present after certain organophosphate containing pesticide exposures.

1. What is the treatment for respiratory secretions in organophosphate overdose/cholinergic toxidrome?
   1. Atropine
   2. Calcium Chloride
   3. Epinephrine
   4. Sodium Bicarbonate

**Answer. a**

The treatment for organophosphate exposure is atropine. Atropine works by outcompeting the excess acetylcholine at muscarinic receptors. Administration will result in drying of the excess saliva, decreased bowel sounds, resolution of bronchospasm, and treatment of bradycardia if present, however large doses of atropine may be required for these effects.

1. What is the intrinsic rate of cardiac cells pacemaker cells in the AV Node/Bundle of His
   1. 20-40 bpm
   2. 40-60 bpm
   3. 60-80 bpm
   4. 80-100 bpm

**Answer: b**

AV node/Bundle of His pacemaker cells generate impulses at rates of 40-60 bpm.

1. Paramedics are managing an adult patient with symptomatic bradycardia after taking too much of their diltiazem. Atropine is not effective and they are currently pacing the patient. What additional therapy should paramedic contact Base to discuss?
2. Atropine
3. Calcium Chloride
4. Epinephrine
5. Sodium Bicarbonate

**Answer: b**

Base contact should be made to discuss administration of Calcium Chloride 1g (10mL) IV push over 60 seconds ([MCG 1317.11, Calcium Chloride](https://file.lacounty.gov/SDSInter/dhs/1053936_1317.11-CalciumChloride2018-07-01.pdf)) as an antidote for suspected calcium channel blocker overdose.

5. A 19 year old male is found unresponsive after a traffic collision. He has multi-system trauma to torso and an open fracture to his femur. BP 120/108 HR 146 RR 8 SpO2 92%. This patient meets criteria to receive prehospital TXA in Los Angeles County.

1. True
2. False

**Answer: a**

True. The HR is greater than the SBP in the setting of multi-system trauma with concern for hemorrhagic shock.