

## **Notes/Educational Pearls**

### **Key Considerations**

1. Recognition and treatment of hyperthermia (including sedatives to decrease heat production from muscular activity) is essential as many deaths are attributable to hyperthermia
2. If law enforcement has placed the patient in handcuffs, this patient needs ongoing physical security for safe transport. Have law enforcement in back of ambulance for the handcuffed patient or make sure proper non-handcuff physical management devices are in place before law enforcement leaves and ambulance departs from scene
3. If patient has signs and symptoms of ACS, consider giving nitroglycerin sublingual (SL) q (quaque, every) 3–5 minutes if SBP greater than 100 mmHg and until pain resolves (if range not desired, use q 3 minutes)
  - a. Vasospasm is often the problem in this case as opposed to a fixed coronary artery lesion
  - b. Consider administration of benzodiazepines as if to treat anxiety
4. Maintaining IV access, cardiac monitor, and SPO<sub>2</sub>/EtCO<sub>2</sub> monitors are key to being able to catch and intervene decompensations in a timely manner
  - a. If agitated, consider restraining the patient to facilitate patient assessment and lessen likelihood of vascular access or monitor displacements
5. Cocaine has sodium channel blocking effects and can cause significant cardiac conduction abnormalities with a widened QRS. Treatment is with sodium bicarbonate similar to a tricyclic antidepressant. Check a 12-lead EKG to assess for these complications

### **Pertinent Assessment Findings**

1. History is as important as the physical examination.
2. If the patient is on psychiatric medication, but has failed to be compliant, this fact alone puts the patient at higher risk for the adverse outcome of delirium with agitated behavior
3. If the patient is found naked, this may elevate the suspicion for stimulant use or abuse. These substances increase the risk for sudden death secondary to delirium with agitated behavior. Neuroleptic malignant syndrome or serotonin syndrome can present with similar signs and symptoms
4. If polypharmacy is suspected, hypertension and tachycardia are expected hemodynamic findings secondary to increased dopamine release. Stimulus reduction from benzodiazepines, anti-psychotics, and ketamine will improve patient's vital signs and behavior
5. Be prepared for the potential of cardiovascular collapse as well as respiratory arrest
6. If a vasopressor is needed, epinephrine or norepinephrine is recommended over dopamine

## **Quality Improvement**

### **Associated NEMSIS Protocol(s) (eProtocol.01)** (for additional information, go to [www.nemesis.org](http://www.nemesis.org))

- 9914225—Medical - Stimulant Poisoning/Overdose

### **Key Documentation Elements**

- Reason for psychologic and physical management procedures used and neurologic/circulatory exams with device use
- Reason for medications selected