



# STUDY POINTS

# Cardiovascular Emergencies

MyEMSCert study points can be used to focus areas of study and preparation. The study point does not contain specific information that would lead you to the diagnosis or correct answer but would instead direct you to learning and reference materials.

### Cardiovascular Emergencies Study Points

#### **Chest Pain**

Management of chest pain and related treatment interactions

#### **Myocardial Infarction**

- Prehospital evaluation and management of patients with STEMI
- Systems of care for STEMI
- Health care system components that are associated with improved outcomes in STEMI
- Importance of bypassing non-PCI hospitals in a STEMI system of care
- Understand the importance of reciprocal changes when interpreting an ECG for the presence of STEMI
- Precautions with regards to the administration of nitroglycerin in STEMI
- Therapeutic interventions for acute STEMI
- Evaluation and management of inferior wall myocardial infarctions

#### **Dyspnea and Congestive Heart Failure**

- · Differential diagnosis of shortness of breath
- · Causes of heart failure
- Characteristics of respiratory distress specific to acute decompensated heart failure
- Treatment of acute decompensated heart failure
- Pre-hospital treatment and clinical presentation of sympathetic crashing acute pulmonary edema (SCAPE)
- Point-of-care ultrasound findings of acute pulmonary edema
- · Physiologic effects and use of high dose nitroglycerin in EMS

#### **Devices**

- Assessment and management of patients with pacemakers
- Implantable cardioverter defibrillators
- Assessment and management of patients with left ventricular assist devices (LVAD)
- Understand potential problems that may be associated with LVADs
- Intra-aortic balloon pump function and management during transport
- Indications for ECMO

## **Protocols and Regulations**

- Legal aspects of EMS
- The impact of destination policies within EMS protocols
- Understand the risks and benefits associated with the use of lights and sirens
- Requirements for hospital designation within a Trauma System of Care
- Understand the difference between the designation and verification of trauma centers
- Injury Severity Scores and Trauma Triage
- Purpose and role of statutes in EMS
- The difference between education, certification, licensure, and credentialing
- Injury Prevention and the 4E's (Education, Enforcement, Engineering and Equity)