## **EM Board Review**

## Course Curriculum





### Cardiovascular

Cardiopulmonary Arrest

Tachydysrhythmias

Bradydysrhythmias

Acute Coronary Syndromes (non-STEMIs)

Acute Coronary Syndromes (STEMIs)

Heart Failure and Cardiomyopathy

Myocardial and Pericardial Diseases

**Arterial and Venous Disorders** 

**Hypertension** 

Valvular Disorders

Congenital Heart Disease

**Cardiac Devices** 



#### **Abdomen and Gastrointestinal**

Esophagus and GI Bleed

Liver

**Biliary and Pancreas** 

Functional/Anatomic Asplenia & Splenomegaly

Splenomegaly (cont.)

Infectious Inflammatory Diseases

Small and Large Bowel

**Rectum and Anus** 



# Thoracic Respiratory

**Upper Airway** 

Chest Wall, Pleura, & Mediastinum

**Obstructive and Restrictive Diseases** 

**Pulmonary Infections** 

ARDS and Pulmonary Hypertension

**Pulmonary Embolism** 



## **Neurology**

Cranial Nerve Disorders

Headache



**CNS Infections** 

Stroke

Seizure Disorders

**Movement Disorders** 

Neuromuscular Disorders

Hydrocephalus

Other CNS Conditions

## Eyes, Ears, Nose & Throat

Ear

Nose

**Throat** 

Eye

Superficial Trauma & Infections

Deep Trauma/Infections, Chronic Findings

# Musculoskeletal

**Bony Abnormalities** 

Muscle Abnormalities

Joint Abnormalities: Arthritic

Joint Abnormalities: Non-Arthritic

**Soft Tissue Infections** 

**Overuse Syndromes** 

**Spine** 

Compression, Myelitis, & Osteomyelitis

Disc Herniation, Sciatica, Inflammatory D/o

## **Dermatology**

**Commonly Tested Rashes** 

Commonly Tested Rashes Q&A

Urticaria & Diffuse Erythema

Purpura, Petechiae, & Bullae

Infections

**Dermatitis** 

Skin Cancers & Derm Potpourri

**Dermatology Review** 

#### Renal & GU

Acute Kidney Injury



Urinalysis

Hemolytic Uremic Syndrome

Chronic Kidney Disease

**Urinary Tract Infection** 

Structural Disorders

Male Genitourinary Infections

Male Genital Structural Disorders

## Obstetrics & Gynecology

Gynecologic Infectious Disorders and Lesions

Ovarian and Uterine Disorders

**Other Pregnancy Complications** 

**Labor and Delivery Complications** 

**Postpartum Complications** 

Cervical and Vaginal Disorders

Vaginal Bleeding in Pregnancy

Hypertension in Pregnancy

# Metabolic & Nutrition

Acid/Base

Glucose Metabolism, DKA, & Cerebral Edema

Type 2 Diabetes, HHS, & Hypoglycemia

Fluid & Electrolyte

**Nutritional Disorders** 

Pituitary & Adrenal

**Thyroid Disorders** 

Parathyroid Disorders

#### **Electrolyte Emergencies**

Hyperkalemia

Hypokalemia

Hyponatremia

Hypercalcemia

High/Low Magnesium

## Hematology

**Oral Anticoagulants** 

**Blood Transfusion** 

**Hemostatic Disorders** 



Inherited

latrogenic

Leukemia, Lymphoma, & Multiple Myeloma

#### **Platelet Disorders**

ITP, TTP, HUS, & HIS

DIC & Diagnostic Approach

Red Blood Cells & Anemia

Sickle Cell Anemia & Hematologic Crises

## **Immune System**

Transplant-related Issues

Hypersensitivity Reactions

#### **Immunologic Conditions**

**External Clues** 

**Internal Findings** 

Review

### Infectious Disorders

STIs, Mycobacteria, & Necrotizing Infections

Bacterial Diarrhea & Botulism

Fungal & Parasitic Diseases

Sepsis, TSS, Syphilis, & Tetanus

Tick-Borne Diseases

#### Viruses

EBV, influenza, HSV, & VZV

HIV, Rabies, & Biologic Weapons

## Trauma

Multiple Trauma Resuscitation

Head Trauma

**Facial Trauma** 

**Neck and Spine Trauma** 

**Chest Trauma** 

**Abdominal Trauma** 

**Genitourinary Trauma** 

Ophthalmologic Trauma

Soft Tissue Trauma

**Special Populations** 

**Hand Injuries** 



Forearm and Elbow Injuries

Wrist Injuries

Shoulder and Humerus Injuries

Knee and Lower Leg Injuries

Ankle and Foot Injuries

Pelvis/Hip/Femur Injuries



# Toxicology

**Analgesics** 

**Ethanol and Toxic Alcohols** 

Anticholinergics

Anticoagulants

Anticonvulsants

**Psychotropics** 

**Antiemetics** 

**Antimicrobials** 

**Toxic Gases** 

Cardiovascular Drugs

**Heavy Metals** 

Household and Industrial Chemicals

Hypoglycemics and Insulin

**Poisonous Plants** 

Drugs of Abuse

Methemoglobinemia

Decontamination and Toxidromes

Cholinergic Agents



# Psychobehavioral

**Eating Disorders** 

Schizophrenia, Somatoform D/o, & Depression

Bipolar, Anxiety, and Panic Disorders

PTSD, OCD, Phobias, Personality Disorder

Delirium vs. Dementia, SUD, & Withdrawal



#### **Environmental**

Bites and Envenomations

Dysbarism

High-altitude Illness



Cold-Related Illness

**Submersion Incidents** 

**Heat-Related Illness** 

Thermal Injury

**Electrical and Radiation Injuries** 



# Ultrasound

**FAST Exam** 

Biliary

AAA - Abdominal Aortic

Renal

Cardiac

**Intrauterine Pregnancy** 

Ocular



## **Pediatric Emergencies**

**Pediatric Overview** 

**Pediatric Resuscitation** 

Neonate and Young Infant Emergencies

**Neonatal Advanced Life Support** 

Pediatric Fever

**Pediatric Respiratory Emergencies** 

Pediatric Neurologic Emergencies

Pediatric Endocrine and Metabolic Emergencies

**Pediatric GI Emergencies** 

**Pediatric GU Emergencies** 

Pediatric Hematologic Emergencies

**Pediatric Orthopedics** 

Pediatric Dermatology



#### **EMS and Disaster Medicine**

The History of EMS

Transportation, EMTALA, & Advanced Directives

Termination of Resuscitation, Medical Control

Disaster Medicine

Terrorism



# Procedures

Thoracotomy & Deep Dive



Cricothyrotomy & Deep Dive Lateral Canthotomy & Deep Dive Chest Tube Placement & Deep Dive Transvenous Pacemaker

## **MyEMCert**

Intro to MyEMcert Modules

### **Key Advances:**

ACEP Seizure Patients
ACEP Acute Headache
AHA ACLS Updates 2018/19

ACEP Opioids
AHA PALS 2019

Adult Patients with Community Acquired PNA

Practice Advances: HEART Score

Practice Advances: Stroke

Practice Advances: Oxygen for MI

2020 Update on Neonatal Resuscitation

Practice Advances: HFNC in Respiratory Failure Practice Advances: Anticoagulant Reversal

Demystifying Lactate in the ED

Pregnancy-Induced Hypertension

Improving Pediatric Readiness in the ED

Outpatient Treatment for Pulmonary Embolism
VL for intubation of Adult Patients in the ED

## **ECG** Review

Common STEMI Patterns

Subtle-Ts

STEMI Equivalents

Pulmonary Embolism

STEMI Mimics: Pericarditis

STEMI Mimics: Benign Early Repolarization

STEMI Mimics: LVH with strain

Syncope: Hypertrophic Cardiomyopathy

Syncope: Brugada Syncope: WPW Syncope: Long QT

