STEMI MIMICS: WHAT IS THE IMPOSTER?

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EMERGENCY CARE TRAUMA SYMPOSIUM
Quick Overview of Six common STEMI mimics

Considerations in the field

Test your knowledge
MANY THINGS CAN PRESENT AS SUSPECTED STEMI:

1. COCAINE (CHEST PAIN)
2. AORTIC DISSECTION
3. PERICARDITIS
4. PNEUMOMEDIASTINUM
5. PNEUMOTHORAX
6. PULMONARY EMBOLISM
ADAPTED BY THE AMERICAN HEART ASSOCIATION (AHA):
Mimics: A quick review of the 6 more common mimics

Highlights of key ideas

Suggested considerations

VIDEO OVERVIEW
Mimic 5: Pneumothorax

Treatment Depends on Size of Pneumothorax

Air in Pleural Space

Patients With Small Pneumos Often Can be Transferred on High Flow Oxygen
• OVERALL: STABILIZE & TRANSPORT.
• COCAINE & CHEST PAIN: INCREASED RISK OF STEMI.
  • USE BENZOS/ASA
  • REFRACTORY CHEST PAIN: NITRATES
  • AVOID BETA BLOCKERS!!! CAN CAUSE HYPERTENSIVE EMERGENCY.

VIDEO SUMMARY: COCAINE/CHEST PAIN
SUMMARY: 
AORTIC DISSECTION

- RARE, OFTEN FATAL, EASY TO MISS
- TREAT DIFFERENTLY THAN STEMI!
- DO NOT GIVE ASA, NTG, ANTICOAGS!!!
- ALS PROVIDERS: HAVE 2 IV SITES ESTABLISHED
- CONSULT MEDICAL CONTROL FIRST
- MINUTES COUNT! TRANSPORT ASAP.
PERICARDITIS:

- STRONGLY MIMICS STEMI
- WATCH FOR CLINICAL CUES/EKG CHANGES
- S/S: FEVER, CHEST PAIN, PLEURISY, POSITIONAL DISCOMFORT
- ST ELEVATIONS, DEPRESSION IN P-R
- LOOKS “WELL” DESPITE EKG FINDINGS
- AVOID: NTG & ANTIPLATELETS
SUMMARY: PNEUMOMEDIASTINUM

PNEUMOMEDIASTINUM:

* Air dissects along the bronchus into the Mediastinum
* Usually due to Alveolar rupture or direct trauma

* Hallmarks:
* T wave inversion, STEMI, Severe substernal CP, “CRUNCHING” during Systole (Hamman’s sign), Substernal Crepitus, dysphagia, cough, stridor, voice changes, “heart attack”, “Can’t Breathe”

* Stabilize & Transport
**SUMMARY:**

**PNEUMOTHORAX**

- Air in pleural space
- Treatment depends on size of pneumo
- Pts. w/small pneumo may tx on high flow oxygen.
- Young pts. may be asymptomatic w/small pneumos.
- S/S: Acute cp &/or dyspnea; decreased or absent breath sounds, st changes, t wave inversion.
- Tension pneumos: May show hypotension, jvd, tracheal deviation, tachycardia
- Stabilize, transport & communicate with medical control, if unstable.
SUMMARY: PULMONARY EMBOLUS (PE)

Vague s/s. “Clot in lungs”

Severity depends on size of Embolus

Hallmarks: Respiratory or CV complaints:
Resp. Distress, Syncope, Hemoptysis, Fever, Alt. Mental status, Pleuritic Chest Pain (Sharp/stabbing)

Immediate transport. Support w/oxygen & establish IV access (ALS). Call Medical control for Unstable patients
DIFFERENCES IN BLS & ALS TREATMENT OF STEMI MIMICS:

Considerations for BLS Teams:
- Hold ASA if possible dissection
- Contact Medical control
- Rapid transport – Minutes count!

Additional Consideration for ALS Teams:
- Establish 2 IV lines
- Treat pain aggressively to decrease BP if suspected dissection
- Rapid transport – Minutes count!
TEST YOUR KNOWLEDGE!

KAHOOT IT!

https://kahoot.com/welcomeback/
KEY TAKEAWAYS:

➢ EMS/Paramedic
  ➢ Speedy transport & constant communication.
  ➢ Realize not all STEMI are actual STEMI

➢ ED RN
  ➢ Get a thorough report from EMS
  ➢ Speedy treatment – work with team to provide quick work-up to determine actual STEMI from a Mimic
  ➢ STEMI or Mimic, both require immediate attention

➢ RN Inpatient/hospital
  ➢ Know what other conditions might present as a STEMI
  ➢ Know signs/symptoms of STEMI and mimics.

➢ ALL: TIME IS MUSCLE!!!
  ➢ Constant communication & teamwork are essential to positive patient outcomes.
QUESTIONS?
References:


thank you