

ED/UC Chest Pain Care Algorithm

Inclusion Criteria:

- No previous cardiac diagnosis
- CC of chest pain

Patient Presents with CC chest pain

Standard workup includes:

- Situational History
- Family History
- Physical exam
- EKG (if none in past 3 months or new symptoms)

Testing shown to be generally unhelpful for initial workup of pediatric chest pain:

- Holter monitor
- Event monitor
- Exercise Test

Red Flags: (Any of the following)

HPI

Chest Pain that is exclusively **Exertional**:

- Exertional defined as:
 - Occurs at peak exercise
 - Does **NOT** occur during low level exercise
 - Same pain does **NOT** occur at rest
 - Is **NOT** reproducible to palpation
- Exertional Syncope
- Positional Chest pain (worse with laying down)

PMHx

- Hypercoagulable state:
- Inflammatory disorder
- Malignancy
- Thrombophilia

Family History

First degree family history of:

- Cardiomyopathy
- Sudden death <50 y/o
- Pacemaker or Defibrillator
- Long QTc Syndrome
- Coronary Anomaly

EKG

- QTc interval > 470
- Pre-excitation
- Abnormal voltage
- T-wave inversion
- Pathological ST segment changes
- Bundle Branch Block

Exam

- Pathologic murmur
- Hepatosplenomegaly
- Loud S2

Any Red Flags?

No

Yes

Non-Cardiac Chest Pain

- Evaluate and treat other etiologies of chest pain identified by H&P
- Musculoskeletal Pain/Costochondritis/Idiopathic
 - Reassurance with no treatment necessary
 - May start anti-inflammatory treatment:
 - Start Ibuprofen 10 mg/kg up to **800 mg po q 6** hour for 48-72 hours to decrease inflammation and then PRN pain

Chest Pain with concern for cardiac etiology

- Refer to cardiology for outpatient follow-up within 1 week if any red flags as outlined above
 - Consider Cardiology Consult in ED if concern for safety to wait for outpatient follow-up, question about EKG
- No need to exercise restrict unless advised to do so by cardiology