

KCH ED OBSERVATION UNIT: Chest Pain Clinical Guidelines

CRITERIA:

Inclusion

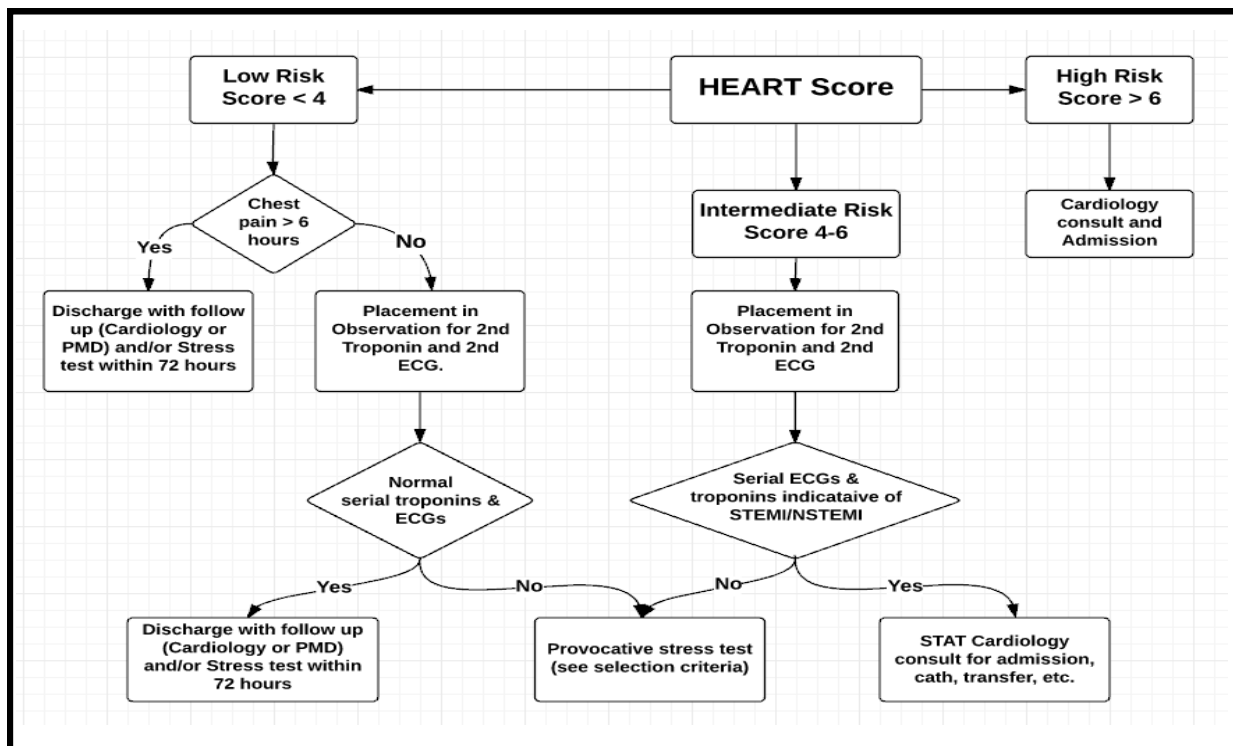
- Age 18-85
- Primary complaint of chest pain
- Heart Score 4-6 (See Below)

Exclusion

- Unstable or significantly abnormal vitals signs (hypotension, fever)
- High risk (heart Score ≥ 7)
- Clinical Impression for alternative high mortality diagnosis (Trauma, PE, Aortic Dissection)
- Altered Mental Status
- Any other need for inpatient admission
- Any factor that will preclude discharge within 48hours

The HEART Score for Chest Pain Patients in the ED		
History	<ul style="list-style-type: none"> • Highly Suspicious • Moderately Suspicious • Slightly or Non-Suspicious 	<ul style="list-style-type: none"> • 2 points • 1 point • 0 points
ECG	<ul style="list-style-type: none"> • Significant ST-Depression • Nonspecific Repolarization • Normal 	<ul style="list-style-type: none"> • 2 points • 1 point • 0 points
Age	<ul style="list-style-type: none"> • ≥ 65 years • $> 45 - < 65$ years • ≤ 45 years 	<ul style="list-style-type: none"> • 2 points • 1 point • 0 points
Risk Factors	<ul style="list-style-type: none"> • ≥ 3 Risk Factors or History of CAD • 1 or 2 Risk Factors • No Risk Factors 	<ul style="list-style-type: none"> • 2 points • 1 point • 0 points
Troponin	<ul style="list-style-type: none"> • $\geq 3 \times$ Normal Limit • $> 1 - < 3 \times$ Normal Limit • \leq Normal Limit 	<ul style="list-style-type: none"> • 2 points • 1 point • 0 points
Risk Factors: DM, current or recent (<one month) smoker, HTN, HLP, family history of CAD, & obesity		
Score 0 – 3: 2.5% MACE over next 6 weeks → Discharge Home		
Score 4 – 6: 20.3% MACE over next 6 weeks → Admit for Clinical Observation		
Score 7 – 10: 72.7% MACE over next 6 weeks → Early Invasive Strategies		

% correlates to occurrence of major adverse cardiac events (MACE) at 6 weeks.
MACE = AMI, PCI, CABG, and death



INTERVENTIONS:

- Serial exams every 4-6 hours
- Serial vital signs every 4 hours
- Telemetry monitoring
- ECG 6 hours after initial and for active or worsening chest pain
- Troponin 6-8 hours after initial test (*only 2 sets of troponins are needed*)
- Aspirin (*if not done in ED*)
- **Routine Cardiology consult to determine need for inpatient provocative testing (*Cardiology Attending rounds in AM*)**
- **Diet:** NPO at midnight for possible stress test in AM. If patient scheduled for afternoon stress test, then light breakfast is allowed.
- Anti-hypertensive as prn (optimal BP for stress testing is < 160/100, however beta blockers, verapamil and diltiazem, should not be given before stress testing w/o Cardiology approval)

Optional

- Nitroglycerin, supplemental oxygen, chest x-ray imaging, other diagnostic testing as indicated.

DISPOSITION:

Home:

- Stable vital signs
- Normal cardiac enzymes
- Stress Test negative (if performed)
- No significant ECG changes
- ED attending does not suspect cardiac ischemia

Admission:

- Unstable vital signs
- Positive Cardiac Enzymes
- Symptoms not improved or worsening condition
- Significant ECG changes
- Significant Stress Test Abnormality
- Another acute process becomes apparent
- Does not meet discharge criteria after observation period

Please note additional orders, such as patient's home medications can be ordered for standing administration