Chest Pain with Cardiac Features

- 12 lead ECG (order immediately and complete within 10 minutes of First Medical Contact)
- Vital Signs recorded
- Draw baseline Troponin

STEMI?

Yes, STEMI

Refer to STEMI Algorithm

Transfer to SBH cath lab as soon as possible

1. Supportive medical therapy according to blood pressure, heart rate/rhythm, oxygenation and anginal pain management.
2. Initiate treatment for ACS undergoing immediate coronary angiography (if not contraindicated):
   a. ASA 160-325 mg PO, if **enteric coated** ensure fully chewed or crushed, and swallow
   b. Intravenous unfractionated heparin 70 units/kg. If not available give intravenous enoxaparin 0.5 mg/kg
   c. Beta blockade, if appropriate
   d. High dose statin, if possible
   e. Telemetry monitoring
   f. No P2Y12 inhibitor pretreatment in the high risk/unstable angina patient recommended for immediate coronary angiography
3. Call VECTRS (204-949-4000) to facilitate the transfer of the unstable patient.

Admit patient and request inpatient cath

1. Complete Cath Lab Referral Form & fax (204-258-1089)
2. Administer treatment for likely ACS (see below)
3. If unsure how to proceed call:
   Winnipeg
   - Concordia, Grace, Seven Oaks Hospitals call internist covering cardiology
   - Victoria Hospital call VECTRS at (204-949-4000)
   - HSC call cardiology consult service

   Outside of Winnipeg:
   - Call VECTRS at (204-949-4000)

Treatment for Likely ACS (unstable angina or NSTEMI):
if no contraindications

- ASA
- P2Y12 = Ticagrelor OR Clopidogrel
- High Dose Statin
- Beta-blocker
- LMW Heparin or Unfractionated Heparin
- Telemetry/patient monitoring

Doses as per local protocol

TIMI SCORE CALCULATOR	
TIMI RISK SCORE FOR UA & NSTEMI	
CRITERIA	POINTS
HISTORICAL	
☐ Age 65 years or more	1
☐ 3 or more Risk Factors for CAD	1
☐ Known CAD (stenosis 50% or more)	1
☐ Aspirin use in past 7 days	1
PRESENTATION	
☐ Recent (24 hours or less) severe angina	1
☐ ST segment deviation 0.5 mm or more	1
☐ Elevated Cardiac Markers	1
RISK SCORE = TOTAL	0 - 7

No, NSTEMI/Unstable angina

Is patient unstable or high risk?

- Recurrent or ongoing chest pain refractory to medical therapy
- Acute heart failure presumed secondary to myocardial ischemia
- Recurrent dynamic ECG changes suggestive of ischemia
- Life Threatening Arrhythmia
- Hemodynamic Instability

Unstable / High Risk

Yes → (Admit patient and request inpatient cath)

No

TIMI Score?

TIMI 3 or greater → (Admit patient and request inpatient cath)

TIMI 2 or less

Repeat Troponin and ECG at 2 hours and then recalculate TIMI Score:

- iSTAT TnI value can be considered negative six hours post onset of chest pain
- hsTnT value can be considered negative after two hours

* 2 different assays are available in Manitoba, larger sites use hsTnT and smaller communities use iSTAT TnI; reporting units and reference values differ (see lab reports)

TIMI Score?

TIMI 3 or greater → (Admit patient and request inpatient cath)

TIMI 2 or less

Consider:

- Pre discharge GXT if available
- Discharge home with follow-up Cardiology/Internal Medicine
- If unsure how to proceed call:
  Winnipeg:
  - Concordia, Grace, Seven Oaks Hospitals call internist covering cardiology
  - Victoria Hospital call VECTRS at (204-949-4000)
  - HSC call cardiology consult service

  Outside of Winnipeg:
  - Call VECTRS at (204-949-4000

Date Revised Dec 2024