

Rapid rule out pathway for myocardial infarction

For use in patients with suspected acute coronary syndrome

Review of pre-hospital and departmental **ECG** by senior staff within 10 mins

Immediate IV access and bloods including **high-sensitivity cardiac troponin T (cTnT)**

Cardiac monitoring

Non-diagnostic or normal

- Consider Aspirin 300 mg
- Sub-lingual GTN or analgesia
- CXR as indicated

ST-depression or T-wave inversion

New horizontal or down sloping ST-depression ≥ 2 mm or deep symmetrical T-wave inversion in 2 adjacent leads

Senior review or cardiology referral

- Aspirin 300 mg
- Sub-lingual GTN or analgesia
- Consider Clopidogrel 300 mg
- Consider Fondaparinux 2.5 mg SC (if not anti-coagulated)
- CXR as indicated

ST-segment elevation

≥ 2 mm in 2 adjacent chest leads or > 1 mm in 2 adjacent limb leads or new LBBB or > 2 mm ST depression V1-V3

Bleep 5834 for emergency PCI

- Aspirin 300 mg
- Clopidogrel 600 mg
- Sub-lingual GTN or analgesia
- Heparin 5,000 units IV (if not anti-coagulated)

Admit and cTnT at 6 hrs

Review cTnT result

Myocardial infarction ruled out

- A) Clear alternative diagnosis;** treat as appropriate
- B) Atypical chest pain or previous negative investigations;** reassure low cardiac risk, chest pain leaflet, and GP follow up
- C) Typical cardiac pain on exertion with no previous investigations;** For RIE refer to Chest Pain Nurse. Out of hours or other sites consider aspirin 75 mg od, GTN spray and referral to RACPC.

<5 ng/L

≥ 2 hrs since symptom onset at time of first test

Intermediate value

Retest when first cTnT result available

CHANGE < 3 ng/L AND ≤ 9 ng/L (female) ≤ 16 ng/L (male)

CHANGE ≥ 3 ng/L

> 9 ng/L (female) > 16 ng/L (male)

Myocardial injury or myocardial infarction

- A) Consider other causes of injury** (e.g. heart failure, kidney disease)
- *If chronic injury suspected retest when first result available – confirmed if CHANGE < 3 ng/L. Senior review.**
- B) If diagnosis of type 1 myocardial infarction:**
- Clopidogrel 300 mg
 - Fondaparinux 2.5mg sc
 - Arrange for admission, senior medical review and repeat at 6 hrs

EMERGENCY DEPARTMENT OR OBSERVATION WARD

HOSPITAL ADMISSION

Admit and cTnT 6 hrs from attendance

Myocardial infarction ruled out

Senior medical review or referral to cardiology

≤ 9 ng/L (female) ≤ 16 ng/L (male)

> 9 ng/L (female) > 16 ng/L (male)

Myocardial injury or infarction

Referral to cardiology for in-patient assessment