Guidance in Assessment and Management of Patients presenting with Chest Pain with Suspected Acute Coronary Syndrome – MORRISTON HOSPITAL (SECONDARY AND TERTIARY CARE)

Clinical Practice Guidelines
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SB ULHB Chest Pain Assessment Pathway

Triage

Chest pain/ symptoms consistent with ACS
Consider differentials (PE, aortic dissection, pneumothorax)
Unstable or unwell patients must be seen promptly by a senior doctor as possible

Care

TRIAGE
Resuscitation room if indicated by severity of symptoms, observations, clinical condition
Monitor ECG, O2 saturations, BP, RR. Measure temperature, record pain score and measure bilateral BP
Bloods: FBC, U&E, glucose and lipid profile (clinician to add HS-TnT or d-dimer)
Oxygen in hypoxia (02 saturations <93%) or patient shocked.

ECG

ECG
Immediate 12-lead ECG – review by ED reg/ consultant as soon as possible

STEMI

Chest pain <12 hours and ECG changes consistent with STEMI.
ST elevation >1mm in 2 contiguous leads
ST elevation >2mm in 2 contiguous leads (Anterior leads)

STEMI management in ED,
STEMI bleep
Aspirin 300mg. Prasugrel 60mg, 5000 units IV heparin.

Assess

Clinical evaluation and risk stratification
Clinical history – nature of pain and risk factors (see box)
Examination
Initial troponin should be taken 2 or more hours after the symptoms. Patients who present earlier than this can wait for a troponin if their symptoms have improved and the ECG is normal (document time the sample is taken).
ECG – repeat as advised post first ECG review
CXR as necessary
HEAR(T) score
Consider other causes and further investigation
Ensure aspirin 300mg given as appropriate
Consider GTN, oxygen as clinically indicated
Other analgesia – titrate morphine

Assess

HEART score		Score
History	Highly suspicious	2
	Moderately suspicious	1
	Slightly suspicious	0
ECG	Significant ST depression	2
	Non-specific repolarisation disturbance	1
	Normal	0
Age	>65 years old	2
	45-65 years old	1
	<45 years old	0
Risk factors	>3 risk factors or history of atherosclerotic disease	2
	1 or 2 risk factors	1
	No risk factors known	0
Troponin	>99th centile at presentation and at 3hrs with >20% relative increase or <99th centile with >50% relative increase.	2
	<99t centile at presentation +/- at 3 hours	0

History
Consider the location and nature of pain: typically crushing/ pressure or tightness retro sternal area radiating to either arm or neck. Lasts longer than 15 minutes, related to exertion, concomitant nausea, vomiting, breathlessness and sweating. Response to nitrates.

Risk factors
Hypertension, obesity, hypercholesterolaemia, family history, diabetes, smoking.

Troponin

Very low risk ACS: symptom onset >2 hours since presentation
Initial HS-TnT ≤ 5ng/L
No ongoing pain, no ECG changes, other life threatening causes unlikely –DISCHARGE post input from ED senior.

Very low risk ACS: symptom onset >2 hours since presentation
Initial HS-TnT <99th centile* HEART score ≤ 2
No ongoing pain, no ECG changes, other life threatening causes unlikely –DISCHARGE post input from ED senior.

Initial HS-TnT significantly raised (>250ng/L)
Review ECG – consider early discussion with cardiology and early treatment for ACS. 2nd HS-TnT might be required to guide management.

Aspirin 300mg PO, clopidogrel 600mg PO, Clexane 1mg/kg SC. Cardiac monitor, repeat ECG, refer to cardiology for admission

***High sensitivity troponin T (Roche assay)**
99th centile: <14ng/L)

Review

Repeat hs-Tn 1 hours after first test, perform further ECG and ensure patient remains symptom free

Discharge or refer

Low risk for ACS
History atypical, HEART score 3 or 4. 1st trop <99th centile, 2nd trop <99th centile with <50% change, ECG not ischaemic. Alternative diagnosis considered.
Discharge post input from ED senior**. Consider hot clinic FU.**

Moderate risk for ACS
History suggestive, HEART score ≥ 5. 1st trop <99th centile, 2nd trop <99th centile with <50% change, ECG not ischaemic.
Alternative diagnosis considered.
Refer to cardiology

High risk for ACS
History suggestive. 1st trop <99th centile, 2nd trop >99th centile with <50% change, Percentile increase >50% or both samples >99th centile with >20 % increase. **Refer to cardiology.**
In very suggestive history with no other possible explanation DW senior / Cardiology irrespective of TnT levels.

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PLEASE ENSURE THAT ALL QUESTIONS ARE ANSWERED – IF NOT APPLICABLE PLEASE PUT N/A

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