Liverpool Acute Chest Pain Proforma

Aintree University Hospital NHS
NHS Foundation Trust

Date: _____ Time: _____

Completed by: _____

If using CP proforma simple note 'see CP proforma ' on acute medical proforma

Lead Authors: Dr Aleem Khand, Consultant cardiologist, Dr Freddy Frost, research Fellow
Contact: Aleem.khand@aintree.nhs.uk (office hours) Evidence Base: B.

PATIENT DETAILS

Name:	DOB:	Unit number:	Gender:

TIMING & DURATION

Time onset:
Duration:
Activity at onset

CHEST PAIN CHARACTERISTICS (please circle)

LOW SUSPICION	MODERATE SUSPICION	HIGH SUSPICION
Non-central (epigastric, L or R sided) Localised chest pain (patient points to discreet position in chest) No radiation Pleuritic element 'Sharp'/ 'Pins and Needles' <5 minutes in duration, non-recurring Other: *≥2 in absence of high suspicion chest pain feature- consider differential diagnosis and investigate/ reassure appropriately. Only consider use of CP pathway/ troponin sampling if overall clinical suspicion of ACS remains*	Elements of both 'High' & 'Low' suspicion *Consider initiating Rx for ACS. Check Hstn , ECG and follow CP pathway*	Central (above epigastric region) Radiation to neck/jaw or arms Worse on exertion or emotion Relieved by rest or GTN Associated autonomic symptoms: e.g. nausea, sweating, vomiting 'Dull'/ 'Squeezing'/ 'Heavy'/ 'tight' ≥ 5 minutes, recurrent Other: *≥2 in absence of low suspicion features: ECG monitoring, Initiate treatment for ACS. Check HsTn T, ECG and follow CP pathway.*

CV Risk /PMH (please circle/ annotate)

Diabetes:
Type 1, type 2, diet controlled
Smoking:
Current: Pack years:
Ex: > 1year, <1 year
Dyslipidaemia:
Hypertension:
PVD:
FH:
Obesity: Y/N (wt= kg ,ht= m)

Previous CABG Year.....
MI Year.....
PCI Year.....

PMH:

Free Text:

MEDICATION

Allergies

OTHER RELEVANT HISTORY

(Social history/Systems Review/Previous relevant investigations)

OBSERVATIONS					
HR:	BP:	RR:	Sats:	Temp	MEWS:

EXAMINATION FINDINGS

INVESTIGATIONS

ECG:		**CXR:**
Presentation troponin Time: _____	_____ng/l	**BLOODS:** (If indicated) Na: K^+: Urea Creat Hb: WCC Platelets
Second troponin SEE LIVERPOOL CHEST PAIN PATHWAY Time: _____	_____ng/l	
GRACE score		http://www.outcomes-umassmed.org/grace/acs_risk/acs_risk_content.html
Grace 6 month mortality		

DIAGNOSIS

1. *2.* *3.*	**Unlikely ACS** *Consider non-ACS diagnoses (see below)* **Likely/Probable ACS** *Consider ACS treatment*

MANAGEMENT

NON-ACS CHEST PAIN DIFFERENTIAL (for guidance)

TROPONIN RAISED		TROPONIN NORMAL	
Cardiac	**Non-cardiac**	**Cardiac**	**Non-cardiac**
Myopericarditis **Pulmonary embolus** **Arrhythmia** **Takotsubo's syndrome**	**Aortic dissection** **Chronically raised troponin eg CKD** **Pneumonia**	**Pericarditis** **Pulmonary embolus**	**Anxiety** **Musculoskeletal** **Pneumonia** **Pancreatitis** **GORD** **Cholecystitis** **Pneumothorax**

Liverpool Acute Chest Pain Pathway

All Troponin results must be interpreted in conjunction with clinical presentation and electrocardiograms.
Repeated episodes of chest pain of an ischaemic nature should be referred for urgent cardiology input regardless of Troponin results

PTO to read the accompanying explanatory notes to this pathway. These include definitions of acronyms and abbreviations etc.

Lead author: Dr Aleem Khand, Consultant Cardiologist
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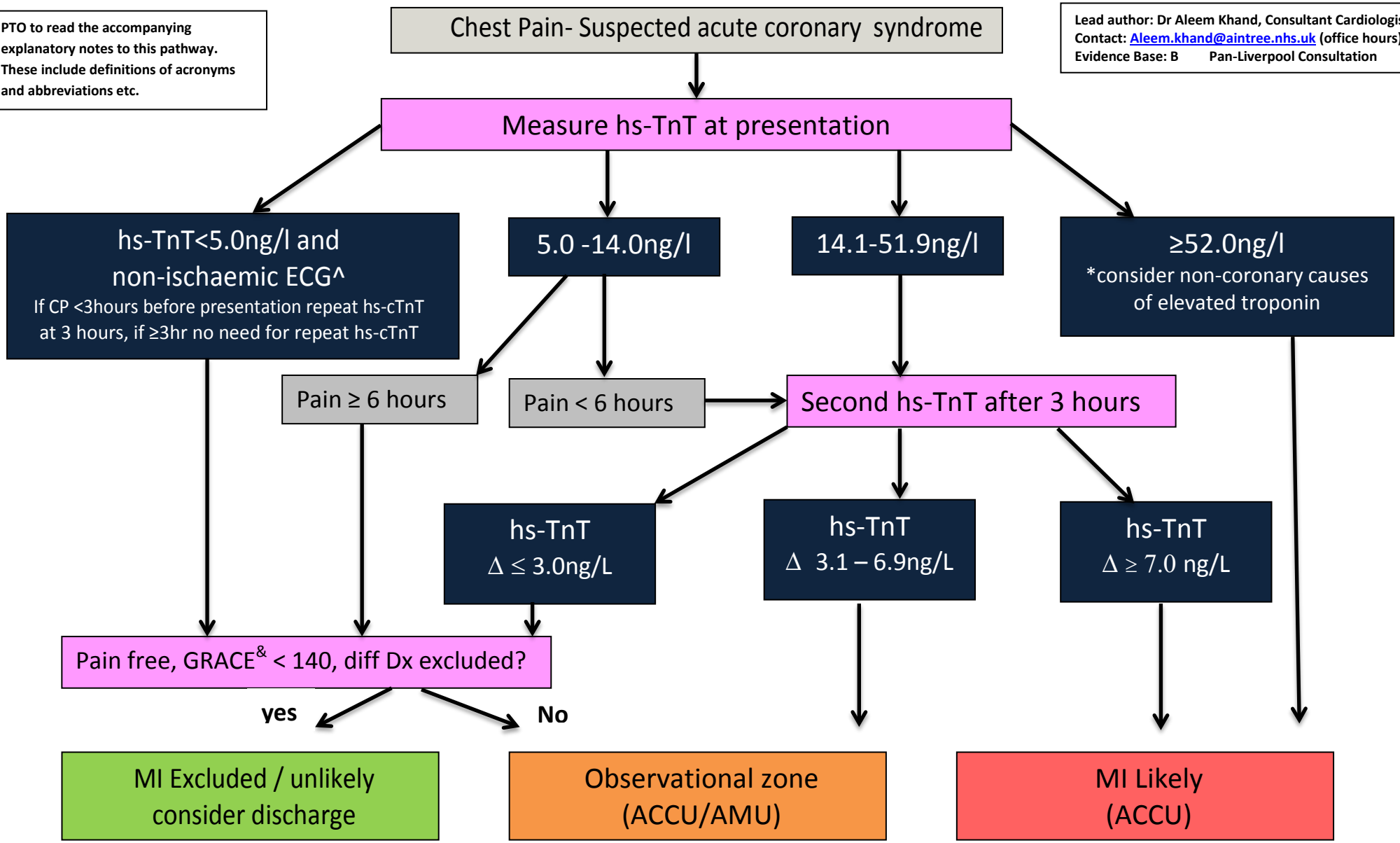
Evidence Base: B Pan-Liverpool Consultation



CG APPROVED ★

This local pathway is an example used in the NICE adoption resource on adoption of high sensitivity troponin for early rule out of NSTEMI. It was not produced for or commissioned by NICE.

Accompanying Notes for Liverpool Acute Chest Pain Pathway

All patients with STEMI on their ECG should be managed according the primary PCI pathway (with emergency transfer to LHCH if criteria fulfilled http://www.cmcsn.nhs.uk/fileuploads/PPCI_Protocol_Final_April_20131.pdf

This pathway is not a substitute for careful history taking, clinical examination and scrutiny of serial electrocardiograms. In cases where clinician/nurse practitioner judgement differ from pathway directed care then clinician/ nurse practitioner judgement should take precedence.

Any patient with ongoing or recurrent ischaemic sounding chest pain should be referred for urgent cardiology input
Any patient with dynamic or baseline ischaemic changes on their ECG should be referred for urgent cardiology input, irrespective of the initial troponin result.

The pathway should be used for patients presenting with chest pain/discomfort/ possible 'ischaemic' symptoms who are suspected to have acute coronary syndrome. Non-cardiac chest pain should be managed accordingly without an hs-TnT check.

The pink boxes refer to time of arrival at accident and emergency. Therefore, blood samples for hs.TnT should be drawn at **presentation**, **irrespective of time of chest pain**, and (for those mandated by the pathway) at **3 hours after presentation**.

For patients with suspected acute coronary syndrome who present early **(<3 hours from the time of [peak] chest pain)** a 2nd troponin at 3 hours should be undertaken even if presentation troponin is <5ng/l with a non-ischaemic ECG

This algorithm is **conditional upon the use of a high sensitivity troponin** and is specific to the ROCHE (elecsys) high sensitivity troponin T (hs-cTnT) biomarker analysed with the standard 18minute assay in the COBAS e601/602 analysers.

Renal function: moderate-severe renal dysfunction is associated with troponin elevation by a number of mechanisms. These patients are more likely to be classified in the 'observation zone'. For patients with moderate-severe renal dysfunction in whom an acute coronary syndrome is suspected, using a Δ20% rise or fall maybe more appropriate, rather than an absolute value, in terms of diagnosing myocardial infarction.

Referrals to Rapid Access Chest Pain Clinics/ HOT clinics: In each trust there will be policies for patient referrals for those discharged for further assessment/ cardiac imaging. This service should be utilised only for patients with suspected coronary disease who are deemed safe to be discharged but require further investigation. It should not be a default position for all acute chest pain patients discharged with the aid of this pathway (a large proportion of whom can be reassured with no follow-up or investigations)

Abbreviations/acronyms:

- Hs-TnT= high sensitive (elecsys- ROCHE) troponin T
- ACCU: Acute Cardiovascular Care Unit, AMU: Acute Medical Unit
- Diff Dx: differential diagnosis
- ^ nonischaemic ECG has the following definition: sinus rhythm or atrial fibrillation/ flutter with VR <110, absence of LBBB, absence of ST segment depression or elevation, absence of T wave inversion or t wave flattening in 2 contiguous leads, absence of paced rhythm.
- *For potential non-coronary causes of troponin elevation please see table http://circ.ahajournals.org/content/124/21/2350.full
- pain ≥ or <6 hours refers to the time between chest pain onset/peak and the time of the first Hs-TnT sample.
- **Δ** refers to the absolute change in troponin values between 1st and 2nd sample (at 3 hours) and can be a **rise or fall**
- All patients in the 'observation zone' should be cared for in the ACCU or the cardiology ward. If they are in A&E or in AMU when the 2nd troponin results indicate that they be categorised in the 'Observation Zone' triage (and thereby require further investigation /clinician input) then they should be transferred to ACCU or the cardiology ward. Care should continue in AMU (or A&E) only in the absence of ACCU or cardiology beds.
- GRACE& refers to the GRACE score. (http://www.gracescore.org/website/WebVersion.aspx)