

Suspected Acute Coronary Syndrome Guideline

HISTORY AND EXAMINATION

Protocol to be used for patients with cardiac-sounding chest pain lasting ≥ 15 minutes
12-LEAD ECG EVERY 30 MINUTES DURING PAIN, AND ONE HOUR AFTER PAIN RESOLVES, UNLESS PAIN RETURNS

STEMI

ST Elevation / DYNAMIC ECG CHANGES

- Two leads: $>2\text{mm}$ V1-V6 or
- 1 mm other leads
- NEW LBBB and compatible history

Chest Pain Resolved
AND
NORMAL or non-Diagnostic ECG
(e.g. no new changes)

ST DEPRESSION OF $>0.5\text{mm}$ OR DEEP T WAVE INVERSION $> 2\text{mm}$
deep

Administer Aspirin 300 mg PO +/- IV Morphine, ONDANSETRON 4mg IV

If TnI on admission $<3\text{ng/L}$
and no ongoing clinical concerns; D/W senior
and discharge home (see overleaf for further guidance).

If TnI 3ng/L - 49ng/L on admission

Repeat TnI 2hrs after first TnI

Please see low risk chest pain pathway overleaf

TnI on admission AND 2 hours later

TnI $\geq 50\text{ng/l}$ (@0hr)

OR change $\geq 20\text{ng/l}$ (over 2hrs)

AND / OR

Dynamic ECG changes

IMMEDIATE Senior ED Review

Activate PPCI Team:

Call (0117 34) 25999 and

contact Cardiology SpR on #6527.

Administer Ticagrelor 180mg* PO

(Unless contraindicated*)

RUH EXT 4326 M-F 9am – 5pm

NBT bleep 9227 M-F 9am – 4pm

Out of hours please contact BHI on 01173425999

High Probability ACS - Admit under medical team if pain free for
Cardiology post-take ward round / cardiology review

If ongoing cardiac chest pain, or discuss with Medical SpR /
Consultant on call & if appropriate contact
Cardiology SpR on # 6527 (UHBW) or 9227 in NBT

Transfer to Cath Lab
as soon as team ready

If definitive diagnosis of NSTEMI-ACS, unless contraindicated, prescribe:

- Clopidogrel 600mg PO (Loading dose)
 - Then 75mg PO, OD
- Fondaparinux 2.5mg[†] s/c, OD
- Bisoprolol 1.25mg PO, OD
- Atorvastatin 80mg PO, OD
- Ramipril 1.25mg PO, OD
- Aspirin 75mg PO, OD
- GTN Spray 1-2 puffs SL, PRN

Immediate Treatment Considerations

*Ticagrelor contraindicated if history of intracerebral haemorrhage or patient on a DOAC: give Clopidogrel 600mg loading dose instead

[†] If patient on DOAC, stop DOAC and do not administer Fondaparinux until next DOAC dose is due.

If Creatinine Clearance $<20\text{ml/min}$. do not administer Fondaparinux. Consider IV Heparin or consult local Trust guidelines / Haematologist.

WARFARIN: For patients on warfarin, check INR. If INR >2 do not give Fondaparinux/Clopidogrel immediately and await Cardiology opinion. If INR <2 give Fondaparinux/Clopidogrel.

Other Considerations

Patients Undergoing Angiography on Oral Anticoagulation

- ◆ Stop anticoagulant 24hrs pre-angiography. Please refer to Clinical Guideline – DOACs (Direct Oral Anticoagulants) – DOACs – a quick guide: APIXABAN (ELIQUIS[®]), DABIGATRAN (PRADAXA[®]), EDOXABAN (LIXIANA[®]) & RIVAROXABAN (XARELTO[®]) <http://nww.avon.nhs.uk/dms/download.aspx?did=18640>
- ◆ If patient on Vitamin K antagonist (e.g., Warfarin) for mechanical valve or other indication for anticoagulation discuss with Cardiology SpR and consider commencing IV heparin as per Trust protocol
- ◆ Aspirin, Clopidogrel and oral anticoagulant for 1 week after PCI followed by oral anticoagulant and Clopidogrel for 12 months (ESC 2017)
 - Please consider bleeding risk in patients requiring triple therapy. Assessment of reversible causes for increased bleeding risk is recommended using the [ORBIT](#) score (NICE2021).
- ◆ Lansoprazole 30mg OD whilst on triple therapy

Low Risk Chest Pain Pathway

Take Troponin I at presentation (anytime from chest pain)
Time 0 hrs

Troponin I
<3ng/L @ anytime from pain
or
<18ng/L ≥6hrs from pain

Troponin I
3-49ng/L

Troponin I
≥50ng/L

Repeat 2 hrs after presentation

Change (+/-)
≥20ng/L

Treat as ACS

YES

Discharge

Baseline TNI (Time 0)
AND
2 hr TNI <18ng/L
with
change <5ng/L

Baseline TNI (Time 0)
AND
2 hr TNI ≥18ng/L - <49ng/L
with
change <5ng/L

Consider Discharge:
If prior evidence of chronic myocardial injury/multimorbidity and no ongoing clinical concern (Senior decision; Registrar or above)

Observation group
Repeat
6hrs after presentation

Troponin I <18ng/L
on ALL values

Troponin I
≥18ng/L
AND
6hr change <11ng/L

Troponin I ≥18ng/L
AND
6hr delta ≥11ng/L

Discharge

Consider Discharge:
If prior evidence of chronic myocardial injury/multimorbidity and no ongoing clinical concern (Senior Decision; Registrar or above)

Treat as ACS

If pain free and ACS Ruled Out, consider other diagnoses. Referral to RACPC if stable angina suspected.
Note: crescendo angina can still be diagnosed without a troponin rise. If suspected admit