Cardiac Chest Pain Pathway

Use this pathway ONLY if Cardiac ischemia is a concern AND another diagnosis is NOT more likely

USE THE RISK ASSESSMENT TOOLS OVERLEAF

Initial Assessment:
- ECG – Screen for STEMI
- BLOODS – Initial TnI

NO

Screen for possible aortic dissection:

High risk conditions:
- Marfan syndrome
- Family history of aortic disease
- Known aortic valve disease
- Recent aortic manipulation
- Known thoracic aortic aneurysm

NO

Screen for other possible ‘Red Flags’:
- Ongoing chest pain
- History strongly suggestive of crescendo angina
- Potential PE or Pancreatitis
- Haemodynamic instability, pulse or BP difference
- Ischaemic changes on ECG, not known to be old
- Troponin above cut-off – Men > 34 ng/L, women > 16 ng/L
- Chemo patient on Fluorouracil (5FU) / Capecitabine

YES

Not for low-risk pathway
- Manage as clinically indicated

High risk conditions:
- Chest, back or abdominal pain described as the following:
  - Abrupt onset
  - Severe intensity
  - Ripping or tearing

NO

Screen for low-risk profile using EDACS score
(See next page for EDACS score)

If EDACS score is 21 or above:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Discharge patient for further testing e.g. stress test or angiogram – to be decided by Cardiologist

If EDACS score is 16-20:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Initial second TnI below cut-off (2nd due at 6-hours after first / worst pain and no less than 2 hours after 1st TnI) All patients must have at least 2 TnI samples
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 12-15:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Initial second TnI below cut-off (2nd due at 6-hours after first / worst pain and no less than 2 hours after 1st TnI) All patients must have at least 2 TnI samples
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 9-11:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Initial second TnI below cut-off (2nd due at 6-hours after first / worst pain and no less than 2 hours after 1st TnI) All patients must have at least 2 TnI samples
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 7-8:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 5-6:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 3-4:
- Admit to Cardiology Ward (or other speciality as appropriate)
  - Discharge with advice they will be contacted for OP stress test
  - Discharge with advice they will be contacted for stress test
  - Case details recorded by Cardiology Registrar for reporting on morning ward round

If EDACS score is 1-2:
- Discharge patient for further testing e.g. stress test or angiogram – to be decided by Cardiologist

If EDACS score is 1 or below:
- Discharge patient for further testing e.g. stress test or angiogram – to be decided by Cardiologist

ADMIT TO:
- GP referral to cardiology = Chest Pain Unit (CPU)
- Self-referral to ED = EO

INVESTIGATIONS:
- 2-hour TnI (2 hours following initial TnI)
- Initial and 2-hour TnI below cut-off and No new ischaemia on ECG

DISPOSITION – Patient suitable for discharge if:
- Discharge with advice they will be contacted for OP stress test and
- OP stress test ideally within 72 hours (unless not indicated, seek SMO advice)
- Case details recorded by cardiology registrar for reporting on morning ward round

ADMIT TO: CPU

DISPOSITION – Patient suitable for discharge if:
- Discharge with advice they will be contacted for stress test
- OP stress test ideally within 72 hours (unless not indicated, seek SMO advice)
- Case details recorded by Cardiology Registrar for reporting on morning ward round

If patient for stress test:
- Complete request form & fax to 80681
- Fast-track notes to CPU (Ward 12)

1 If patient for stress test: a) Complete request form & fax to 80681
   b) Fast-track notes to CPU (Ward 12)

1 Patient should not usually remain on CPU (or EO) while awaiting stress test
### A STEMI CRITERIA:

- □ 1mm ST elevation in ≥ 2 limb leads
- □ 2mm ST elevation in ≥ 2 precordial leads
- □ New LBBB with symptoms of ischaemia
- □ Old LBBB with either:
  - □ ≥ 1mm ST elevation where QRS complex is predominantly positive
  - □ ≥ 5mm ST elevation where QRS complex is predominantly negative

### Risk assessment

- – NSTEMI / unstable angina
- – Acute Coronary Syndrome (ACS) i.e., potential NSTEMI / unstable angina

### B Emergency Department Assessment of Chest-Pain score (EDACS)

#### Clinical Characteristics:

<table>
<thead>
<tr>
<th>A. Age</th>
<th>18-45 = + 2</th>
<th>51-55 = + 6</th>
<th>61-65 = + 10</th>
<th>71-75 = + 14</th>
<th>81-85 = + 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-50 = + 4</td>
<td>56-60 = + 8</td>
<td>66-70 = + 12</td>
<td>76-80 = + 16</td>
<td>86+ = + 20</td>
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</tr>
</tbody>
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#### B. Risk Factors – Age related

- **Age 51+**
  - = 0
- **Age 18-50 with NO known CAD** AND LESS THAN 3 of the other 5 risk factors
  - = 0
- **Age 18-50 with ANY known CAD** OR THREE OR MORE of the other 5 risk factors
  - = + 4  

*Known CAD = Previous AMI, CABG of PCI in men age < 55 years or women age < 65 years

#### Other 5 risk factors:

- □ 1. Family history premature CAD
- □ 2. Diabetes
- □ 3. Dislipidaemia
- □ 4. Hypertension
- □ 5. Current smoker

#### C. Symptoms

- □ Diaphoresis (in association with pain**)
  - = + 3
- □ Pain** occurs or worsened with inspiration (pleuritic)
  - = – 4  
  - NB: may be a negative score
- □ Pain** radiates to arm or shoulder
  - = + 5
- □ Pain** reproduced by palpation
  - = – 6

** Pain that caused presentation to hospital

#### D. Gender

- □ Male = + 6
- □ Female = 0

** TOTAL SCORE **