This guidance is to assist GPs in decision making and is not intended to replace clinical judgment.

Chest Pain

<u>History</u>

- · Character: Dull, heavy, aching, crushing, gripping, other
- Frequency and onset of chest pain
- Exterior radiation: jaw, arm, other
- Are there any associated symptoms?
- Does patient have the pain now or within the last 12 hours?
- Is the pain associated with anxiety? · Are there any associated symptoms which says any
- CV risk factors: age, smoking, hypertension, first degree relative, lipid, diabetes
- Is there a history of ischaemic heart disease or any previous cardiac investigations?
- Any history of respiratory, gastrointestinal or

exacerbating factors eg exercise or inspiration?

- musculoskeletal disease, trauma, or anxiety/depression? Assess patients for the symptoms of ACS.
- · Chest pain and/or pain in arms, back or jaw lasting >15 mins
- Assoc with nausea and vomiting, marked sweating, breathlessness, or a combination of these
- Assoc with haemodynamic instability
- New onset or abrupt deterioration in previously stable angina, with recurrent chest pain occurring frequently and

Examination

with little or no exertion, and with episodes lasting>15mins.

- Pulse rate, rhythm and character, delay between arms
- Pulses (delay)
- Blood pressure in both arms (>20mmHg consider aortic dissection)
- Heart sounds -? murmur, pericordial rub • SaO2
- Signs of heart failure
- Xanthelasma

If patient clearly needs hospital admission do not delay for investigations

12 Lead ECG if available - a normal ECG does not rule out cardiac ischaemia FBC, Renal, TFTs, Lipids, Gluc, HbA1C, CRP, ESR, LFTs, Amy **Consider CXR**

Suspected ACS with:

- **Current chest pain**
- Signs of complications e.g. pulmonary oedema
- Pain free but pain in last 12 hours with abnormal ECG or ECG not available
- A recent hx of ACS with further chest pain Other serious causes of chest pain as per clinical
- judgement.

Clinical signs:

- RR>30/min HR >130/min
- BP<90/60 unless normal for them
- SaO2<92% or central cyanosis (if no hx chronic hypoxia) Altered consciousness
- High temp esp if >38.5

No

Does the patient have any of the below?

- Chest pain at rest or minimal exertion
- New onset chest pain
- Abrupt deterioration from normal chest pain (in previously stable angina)
- Increasing frequency Crescendo angina
- Chest pain associated with autonomic symptoms Chest pain associated with syncope
- Chest pain associated with haemodynamic instability
- Chest pain in the last 12 hours, but are now pain free with a normal resting 12 lead ECG (if available) Last episode of pain was 12-72 hours ago

For patients where the pain has resolved and there are signs of complication such as pulmonary oedema use clinical judgement to determine whether an emergency or urgent same day assessment is required.

No

Estimate % likelihood of coronary artery disease (CAD) (see appendix 1)

Other diagnoses to consider in patients with

Aortic stenosis - elderly, ejection systolic murmur,

Hypertrophic cardiomyopathy - FH cardiomyopathy,

Aortic dissection – severe chest pain radiating to

Arrhythmias - assoc palpitations, breathlessness,

tiredness, SOB, orthopnea, cough, inc JVP, gallop

back, unequal pulses or blood pressure in arms,

associated murmur of AR, uncontrolled blood

Congestive cardiac failure - ankle swelling,

rhythm, inspiratory basal creps, occ wheeze.

Pericarditis/Cardiac tamponade - sharp pain

relieved by sitting forward, may radiate, and be

pericardial rub (best heard Left sternal edge in expiration). Cardiac tamponade may have SOB,

cough, hoarseness, dysphagia and pulsus

long haul flight, recent surgery, malignancy

exacerbated by lying on left side, inspiration, cough,

paradoxus, hypotension, muffled HS, jugular venous

Pulmonary Embolism - risk factors: smoking, OCP,

swallowing. May have fever, cough arthralgia and

LVH on ECG, associated SOB, syncope

cardiac chest pain

sickle cell disease

pressure

dizziness

distension

< 10 % risk of CAD

Normal ECG and no cardiac risk factors Likely non-specific chest pain - accounts for 16%

<10% likelihood

10 care chest pain.

https://www.nice.org.uk/guidance/cg95

Manage in Primary Care

Musculoskeletal chest pain Pleuritic chest pain - consider respiratory referral

Dyspetic/ upper GI - consider GI referral Anxiety - measures to help, lifestyle modifications

Those holding HGV license may need to inform the DVLA. For further information please refer to the following link

Refer to general cardiology clinic History of IHD with worsening

symptoms **Previous CABG or PCI with** recurrent angina Previous MI with recurrent angina

Patient needs information about their condition and how to manage it

Refer to Rapid Access Chest Pain Clinic

>10% likelihood

Previous cardiac history?

No

Whilst waiting for ambulance to arrive:

Single loading dose of 300mg aspirin

agents should only be offered in hospital.

administered. Monitor oxygen saturation.

hypercapnic respiratory failure, aiming for

-in those with COPD at risk of hypercapnic

SpO2 of 88–92% until blood gas analysis

Only offer supplemental oxygen where:

-SpO2 <94% in those not at risk of

Refer for urgent

same-day

cardiology

assessment

unless allergic to it. Other antiplatelet

Oxygen should not routinely be

Sit patient up

-Yes-**→**

For suspected ACS:

SpO2 of 94-98%

available.

Pain relief (with GTN)

suggesting angina Risk factors of IHD

>10% risk of CAD

New onset of chest pain

Prescribe aspirin 75mg daily whilst referral pending

Referral to Cardiac Rehab (via cardiology). It includes:

- An exercise component Offer information on welfare/housing issues
- Information on returning to work/normal activities Sexual health
- Psychological wellbeing/stress and anxiety management
- Lifestyle changes
- •Drug therapy and patient involvement in treatment to promote adherence

Comments & enquiries relating to medication: CCCG Medicines Management Team mmt.camdenccg@nhs.net

This pathway is currently under review – as some of the content may be out of date, it should be viewed as an archive document for information only. Please contact Camden MMT for up-to-date information/advice.

Pathway created by NCL **Approved by Clinical Cabinet Nov**

Review due Nov 2020

Appendix 1 Percentage of people estimated to have coronary artery disease according to typicality of symptoms, age, sex and risk factors

		Non-anginal chest pain					Atypical angina *1						Typical angina *2						
		Men			Women			Men			Women			Men			Woi	Women	
Low/high risk		Lo	Hi		Lo	Hi		Lo	Hi		Lo	Hi		Lo	Hi		Lo	Hi	
Age (years)	35	3	35		1	19		8	59		2	39		30	88		10	78	
	45	9	47		2	22		21	70		5	43		51	92		20	79	
	55	23	59		4	25		45	79		10	47		80	95		38	82	
	65	49	69		9	29		71	86		20	51		93	97	,	56	84	

For men older than 70 with atypical or typical symptoms, assume an estimate > 90%.

For women older than 70, assume an estimate of 61–90% EXCEPT women at high risk AND with typical symptoms where a risk of > 90% should be assumed.

Values are per cent of people at each mid-decade age with significant coronary artery disease (CAD)[4].

Hi = High risk = diabetes, smoking and hyperlipidaemia (total cholesterol > 6.47 mmol/litre).

Lo = Low risk = none of these three.

The 'non-anginal chest pain' columns represent people with symptoms of non-anginal chest pain, who would not be investigated for stable angina routinely.

Note:

These results are likely to overestimate CAD in primary care populations.

If there are resting ECG ST-T changes or Q waves, the likelihood of CAD is higher in each cell of the table.

Adapted from Pryor DB, Shaw L, McCants CB et al. (1993) Value of the history and physical in identifying patients at increased risk for coronary artery disease. Annals of Internal Medicine 118(2): 81–90.

*1 Atypical angina presents with two of the above features. In addition, atypical symptoms include gastrointestinal discomfort, and/or breathlessness and/or nausea.

***2 Typical angina** presents with all three of the following features:

Precipitated by physical exertion.

Constricting discomfort anterior chest, neck, shoulders, jaw, or arms.

Relieved by rest or GTN within 5 mins.