

# Cardiovascular history

بسهالله

اللهم اجعله هذا العمل خالصاً لوجهك نافعاً لأمنك موصلاً إليك لاصارفاً عنك آميه اللهم اجعله هذا العمل خالصاً لوجهك نافعاً

## First:

Introduce yourself to the patient including your name and role.

Confirm the patient's name and date of birth.

Explain that you'd like to take a history from the patient.

Gain consent to proceed with history taking.

# **Presenting complaint:**

Use open questioning to explore the patient's presenting complaint:

- "What's brought you in to see me today?"
- · "Tell me about the issues you've been experiencing."

Provide the patient with enough time to answer and avoid interrupting them.







Facilitate the patient to expand on their presenting complaint if required:

- · "Ok, can you tell me more about that?"
- "Can you explain what that pain was like?"Once the patient has finished speaking, it is helpful to check if there are
  any other issues. If the patient has multiple presenting complaints, work with them to establish a shared agenda for
  the rest of the consultation

# Key cardiovascular symptoms:

Patients with cardiovascular pathology can present with a wide variety of symptoms including but not limited to, chest pain, dyspnoea, palpitations, syncope, oedema and fatigue. The SOCRATES acronym (explained below) is a useful tool that you can use to explore each of the patient's presenting symptoms.

Symptoms that are typically associated with cardiovascular disease include:

- Chest pain: typically central or left-sided (e.g. pericarditis) and may radiate to the left arm and jaw (e.g. acute coronary syndrome). In some cases, patients having a myocardial infarction may complain of neck pain rather than chest pain.
- Dyspnoea: shortness of breath which may be exertional, related to lying down (orthopnoea) or wake the patient from sleep (paroxysmal nocturnal dyspnoea).
- Palpitations: a sensation of a fast-beating, fluttering or pounding heart that may feel regular or irregular. It can be useful to ask the patient to tap out the rhythm to assess its regularity.
- Syncope: rapid onset loss of consciousness (LOC) secondary to reduced cerebral perfusion. The LOC is typically short in duration with the patient recovering spontaneously. Syncope may be associated with sudden changes in posture (e.g. postural hypotension), exertion (e.g. aortic stenosis) or occur randomly (e.g. arrhythmia).
- Oedema: fluid retention in the tissues which may be peripheral (e.g. pedal oedema) or central (e.g. sacral oedema).
   In the context of a cardiovascular history, the cause of oedema is most likely to be congestive heart failure or a side effect of medications such as amlodipine.
- Intermittent claudication: muscle pain, typically in the calf, that develops during mild exertion and resolves upon resting. Intermittent claudication is caused by inadequate arterial supply secondary to peripheral vascular disease.
- Systemic symptoms: these can include fatigue (e.g. congestive heart failure), fever (e.g. pericarditis, endocarditis), weight loss (e.g. endocarditis, atrial myxoma) and weight gain (e.g. congestive heart failure).







## Socrates:

The SOCRATES acronym is a useful tool for exploring each of the patient's presenting symptoms in more detail. It is most commonly used to explore pain, but it can be applied to other symptoms, although some of the elements of SOCRATES may not be relevant to all symptoms.

#### **Site**

Ask about the location of the symptom:

- · "Where is the pain?"
- "Can you point to where you experience the pain?"

#### **Onset**

Clarify how and when the symptom developed:

- "Did the pain come on suddenly or gradually?"
- "When did the pain first start?"
- "What were you doing when the pain started?"
- · "How long have you been experiencing the pain?"

#### Character

Ask about the specific characteristics of the symptom:

- · "How would you describe the pain?" (e.g. dull ache, throbbing, sharp)
- · "Is the pain constant or does it come and go?"

#### **Radiation**

Ask if the symptom moves anywhere else:

· "Does the pain spread elsewhere?"







"Have you noticed the chest pain spreading towards your arm, back or neck?"

#### **Associated symptoms**

Ask if there are other symptoms which are associated with the primary symptom:

• "Are there any other symptoms that seem associated with the pain?" (e.g. fever in pericarditis, weight gain in heart failure)

#### Time course

Clarify how the symptom has changed over time:

· "How has the pain changed over time?"

#### **Exacerbating or relieving factors**

Ask if anything makes the symptom worse or better:

- · "Does anything make the pain worse?" (e.g. exertion in angina, lying flat in pericarditis)
- "Does anything make the pain better?" (e.g. glyceryl trinitrate in angina, leaning forwards in pericarditis)

#### Severity

Assess the severity of the symptom by asking the patient to grade it on a scale of 0-10, You can also ask how far a patient is able to walk (either on the flat or at an incline) without having to stop before they experience chest pain or significant breathlessness to get an idea of their current performance status.

#### Cardiovascular risk factors

When taking a cardiovascular history it's essential that you identify **risk factors** for **cardiovascular disease** as you work through the patient's history (e.g. past medical history, family history, social history).

Important cardiovascular risk factors include:

- Hypertension
- Hyperlipidaemia
- Diabetes
- Family history of cardiac disease
- Smoking







# Systemic enquiry:

A <u>systemic enquiry</u> involves performing a brief screen for symptoms in other body systems which may or may not be relevant to the primary presenting complaint. A systemic enquiry may also identify symptoms that the patient has forgotten to mention in the presenting complaint.

Deciding on which symptoms to ask about depends on the presenting complaint and your level of experience.

Some examples of symptoms you could screen for in each system include:

- · Systemic: fevers, weight change, fatigue
- · Respiratory: dyspnoea, cough, sputum, wheeze, haemoptysis, pleuritic chest pain
- · Gastrointestinal: dyspepsia, nausea, vomiting, dysphagia, abdominal pain
- · Genitourinary: oliguria, polyuria
- · Neurological: visual changes, motor or sensory disturbances, headache
- · Musculoskeletal: chest wall pain, trauma
- · Dermatological: rashes, ulcers

# Past medical history:

Ask if the patient has any medical conditions:

- · "Do you have any medical conditions?"
- · "Are you currently seeing a doctor or specialist regularly?"







If the patient does have a medical condition, you should gather more details to assess how well controlled the disease is and what treatment(s) the patient is receiving. It is also important to ask about any complications associated with the condition including hospital admissions.

Ask if the patient has previously undergone any surgery or procedures (e.g. coronary artery bypass grafts, coronary artery stents, heart valve replacements):

- · "Have you ever previously undergone any operations or procedures?"
- "When was the operation/procedure and why was it performed?"

#### **Allergies**

Ask if the patient has any allergies and if so, clarify what kind of reaction they had to the substance (e.g. mild rash vs anaphylaxis).

#### **Examples of relevant medical conditions**

Medical conditions relevant to cardiovascular disease include:

- Hypertension
- Hyperlipidaemia
- Angina
- Myocardial infarction
- Obesity
- Chronic kidney disease
- Atrial fibrillation
- Stroke
- Peripheral vascular disease
- Rheumatic fever

# **Drug history:**

Ask if the patient is currently taking any prescribed medications or over-the-counter remedies:

• "Are you currently taking any prescribed medications or over-the-counter treatments?"

If the patient is taking prescribed or over the counter medications, document the medication name, dose, frequency, form and route.







Ask the patient if they're currently experiencing any side effects from their medication:

"Have you noticed any side effects from the medication you currently take?"

## Family history:

Ask the patient if there is any family history of cardiovascular disease:

• "Do any of your parents or siblings have any heart problems?"

Clarify at what age the cardiovascular disease developed (disease developing at a younger age is more likely to be associated with genetic factors):

- · "At what age did your father suffer his first heart attack?"
- · "When was your mother first diagnosed with high blood pressure?"

If one of the patient's close relatives are deceased, sensitively determine the age at which they died and the cause of death:

- "I'm really sorry to hear that, do you mind me asking how old your dad was when he died?"
- "Do you remember what medical condition was felt to have caused his death?"

If the patient reports unexplained sudden deaths in young relatives, consider the possibility of cardiac channelopathies (e.g. Brugada syndrome, long QT syndrome).

# Social history:

### **General social context**

Explore the patient's general social context including:

- the type of accommodation they currently reside in (e.g. house, bungalow) and if there are any adaptations to assist them (e.g. stairlift)
- · who else the patient lives with and their personal support network
- what tasks they are able to carry out independently and what they require assistance with (e.g. self-hygiene, housework, food shopping)
- if they have any carer input (e.g. twice daily carer visits)



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## **Smoking**

Record the patient's smoking history, including the type and amount of tobacco used.

Calculate the number of 'pack-years' the patient has smoked for to determine their cardiovascular risk profile:

- pack-years = [number of years smoked] x [average number of packs smoked per day]
- one pack is equal to 20 cigarettes

See our smoking cessation guide for more details.

#### **Alcohol**

Record the frequency, type and volume of alcohol consumed on a weekly basis.

## Recreational drug use

Ask the patient if they use recreational drugs and if so determine the type of drugs used and their frequency of use. Recreational drugs may be the underlying cause of a patient's presentation with cardiovascular symptoms:

- Cocaine, ecstasy and amphetamines activate the sympathetic nervous system and thus have similar cardiovascular effects which can include tachycardia (palpitations), blood pressure abnormalities (dizziness, headache) and coronary artery vasospasm (chest pain).
- Opiates including morphine and heroin activate the parasympathetic nervous system leading to bradyarrhythmias and hypotension (syncope).
- Cannabis activates the sympathetic nervous system at low doses (e.g. tachycardia, hypertension) and the parasympathetic nervous system at higher doses (e.g. bradycardia, hypotension).
- Intravenous drug use of any kind predisposes patients to bacterial endocarditis.

#### Diet

Ask if the patient what their diet looks like on an average day. Take note of unhealthy foods which are known to contribute to cardiovascular disease (e.g. high salt intake, high saturated fat intake).







## **Exercise**

Ask if the patient regularly exercises (including frequency and exercise type).

## **Occupation**

Ask about the patient's current occupation:

- Assess the patient's level of activity in their occupation (sedentary jobs are associated with increased cardiovascular risk).
- If the patient is experiencing episodes of syncope and works with heavy machinery or at heights, it is important to advise them to take time off work until they have been fully investigated.

## **Driving**

If the patient drives and has presented with syncope or other concerning cardiovascular symptoms it is important to advise them not to drive until they have been fully investigated and to inform the relevant driving authority (e.g. DVLA) of their current medical issues.

# At the end of history:

Summarise the key points back to the patient. Ask the patient if they have any questions or concerns that have not been addressed.

Thank the patient for their time.



