Respiratory history

بسم الله

اللهم اجعل هذا العمل خالصاً لوجهك نافعاً لأمتك موصلاً إليك لا صارفاً عنك آمين

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 complain :

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.

History of presenting complain:

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

Key respiratory symptoms

Symptoms that are typically associated with respiratory disease include:

- **Dyspnoea**: shortness of breath associated with a wide range of respiratory pathology including pneumonia, asthma and chronic obstructive pulmonary disease (COPD).
- **Cough**: can be productive (e.g. pneumonia, COPD, bronchiectasis) or dry (e.g. pulmonary fibrosis, side effect of ACE inhibitors).
- **Haemoptysis**: the coughing up of blood originating from the respiratory tract below the level of the larynx. Haemoptysis is typically associated with lung cancer but can be a rare clinical feature of pulmonary embolism.
- **Wheeze**: a continuous, coarse, whistling sound produced in the respiratory airways during breathing. It is commonly associated with conditions such as asthma, COPD and anaphylaxis.
- **Chest pain**: typically worsened by deep inspiration due to being pleuritic in nature (e.g. pulmonary embolism, pleurisy).

- **Systemic symptoms**: these can include fatigue (e.g. lung cancer, COPD), fever (e.g. pneumonia), and weight loss (e.g. end-stage COPD, lung cancer).

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 most 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 shortness of breath come on suddenly or gradually?"
- "When did the shortness of breath first start?"
- "How long have you been experiencing the shortness of breath?"

Character

Ask about the specific characteristics of the symptom:

- "How would you describe the shortness of breath?" (e.g. "tight chest", "can't take a deep breath")
- "Is the shortness of breath constant or does it come and go?"

Radiation

Ask if the symptom moves anywhere else:

- "Does the chest pain spread elsewhere?"

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 pneumonia, shortness of breath and haemoptysis in pulmonary embolism)

Time course

Clarify how the symptom has changed over time:

- "How has the shortness of breath changed over time?"

Exacerbating or relieving factors

Ask if anything makes the symptom worse or better:

- "Does anything make the shortness of breath worse?" (e.g. exertion, exposure to an allergen, cold air)
- "Does anything make the pain better?" (e.g. rest, inhaler)

Severity

Assess the severity of the symptom by asking the patient to grade it on a scale of 0-10:

- **"On a scale of 0-10, how severe is the chest pain, if 0 is no pain and 10 is the worst pain you've ever experienced?"**

If the symptom is shortness of breath, the severity can be bluntly assessed by assessing if the patient is able to speak in full sentences without having to take a breath. You can also ask how far a patient is able to walk (either on the flat or at an incline) without having to stop to take a breath to get an idea of their current performance status.

Respiratory risk factors

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

Important **respiratory risk factors** include:

- Pre-existing respiratory disease (e.g. asthma, COPD)
- Family history of respiratory disease (e.g. cystic fibrosis, alpha-1 antitrypsin deficiency)
- Smoking
- Occupational exposure (e.g. coal mining, farming)
- Hobbies (e.g. bird keeping)

Systemic enquiry :

A systemic enquiry 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
- Cardiovascular: chest pain, palpitations, oedema, syncope, orthopnoea
- Gastrointestinal: nausea, vomiting, dysphagia, abdominal pain
- Genitourinary: oliguria, polyuria
- Neurological: visual changes, motor or sensory disturbances, headache, confusion
- Musculoskeletal: chest wall pain, trauma
- Dermatological: rashes

Travel history :

If the patient's symptoms are suggestive of an infective aetiology, particularly tuberculosis (TB), take a travel history to assess exposure risk (e.g. travel through areas of high TB prevalence).

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 (e.g. if asthmatic, ask if they have ever been admitted to ITU with an exacerbation).

Ask if the patient has previously undergone any surgery or procedures (e.g. lobectomy, bronchoscopy):

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

Immunisation history

Ask the patient if they have been vaccinated against respiratory diseases such as:

- **Influenza**
- **Pneumococcus**
- **COVID-19**
- **Tuberculosis**

You should also clarify when the patient received these vaccinations.

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 **respiratory disease** include:

- Asthma
- COPD
- Lung cancer
- Bronchiectasis
- Pulmonary fibrosis
- Pulmonary embolism
- Tuberculosis
- Neuromuscular conditions (e.g. motor neurone disease)
- Congestive heart failure
- Cor pulmonale
- Cystic fibrosis
- Alpha-1 antitrypsin deficiency

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 (e.g. dry cough with ACE inhibitor):

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

Commonly prescribed respiratory medications

Medications commonly **prescribed** to patients with respiratory disease include:

- Short-acting beta-2-agonist inhalers (e.g. salbutamol, terbutaline)
- Long-acting beta-2-agonist inhalers (e.g. salmeterol, formoterol)
- Inhaled corticosteroid inhalers (e.g. fluticasone, budesonide, beclometasone)
- Short-acting antimuscarinic inhalers (e.g. ipratropium)
- Long-acting antimuscarinic inhalers (e.g. tiotropium)
- Oral steroids (e.g. prednisolone)
- Theophylline
- Antibiotics (e.g. co-amoxiclav, doxycycline, azithromycin)
- Anticoagulants (e.g. warfarin, apixaban)

Some **over the counter drugs** which may impact the respiratory system include:

- Aspirin (may worsen haemoptysis if already present)
- St John's Wort (an enzyme inducer which may reduce the effects of warfarin)

Medications with respiratory side effects

Medications with **respiratory side effects** include:

- Beta-blockers and NSAIDs (bronchoconstriction)
- ACE inhibitors (dry cough)
- Oestrogen-containing medication (increased risk of pulmonary embolism)
- Amiodarone and methotrexate (pleural effusions, interstitial lung disease)

Family history :

Ask the patient if there is any family history of respiratory disease (e.g. asthma, eczema, hay fever, cystic fibrosis, lung cancer):

- **"Do any of your parents or siblings have any lung problems?"**

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

Social history :

Explore the patient's social history to both understand their social context and identify potential respiratory risk factors.

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, home oxygen)
- 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)

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 cardiorespiratory 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.

See our alcohol history taking guide for more information.

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. Smoking drugs such as cannabis regularly increases the risk of lung cancer.

Gambling

Ask the patient if they gamble and if they feel this is a problem.

Gambling is causative of several decrements to health directly, such as increased sedentary behaviour during the time spent gambling, poor sleep, reduced levels of self-care and anxiety. Patients with a gambling problem are also more likely to have substance misuse issues.1

Problematic gambling can be assessed via the Problem Gambling Severity Index (PGSI).

Exercise

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

Occupation

Explore the patient's current and previous occupations to identify potential exposure to agents which can lead to respiratory disease:

- Coal mining is associated with the development of pneumoconiosis.
- Farmers are at increased risk of developing allergic extrinsic alveolitis.
- Those working in shipyards, construction and plumbing may have been exposed to asbestos increasing their risk of mesothelioma.

Pets and hobbies

Ask if the patient has any pets: allergies to pets are common and may not be immediately obvious (e.g. the patient has a wheezy chest when at home, but not when outside).

Hobbies such as bird-keeping can increase a patient's risk of developing allergic extrinsic alveolitis (often referred to as 'bird fancier's lung').

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.