



PULSE

Nursing
IN PRACTICE

Top ten tips for making a timely and accurate diagnosis

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1. Don't assume a previous diagnosis is correct

There is good evidence that many people with asthma are misdiagnosed in both primary and secondary care, so if the picture doesn't fit, it is worth re-evaluating. Similarly, problems within the healthcare system can result in COPD being misdiagnosed. This may be based on an X-ray report or clinical assessment, following a breathless episode or acute admission, without recourse to confirmatory spirometry. Unfortunately, inaccurate coding can identify the patient as having COPD, both in hospital discharge coded letters and in electronic practice coded records.

2. Don't assume that symptoms of breathlessness always have to be due to one cause

Many people with asthma or COPD will have other causes that contribute to their symptoms. Some of these are obvious (but can easily be overlooked) and include obesity, deconditioning (losing fitness) or anxiety. Some of these are of high significance (lung cancer, heart failure, atrial fibrillation, bronchiectasis), yet are overlooked and simply assumed to be due to the existing respiratory diagnosis.

3. A good history is vital

We know that a good and accurate diagnosis is based on the history of the patient, as well as the fact that most people with common conditions present the common symptoms of those conditions. People with COPD usually present with slowly progressive breathlessness, reoccurring cough and episodes of bronchitis with a likely history of smoking. As the progression of breathlessness is often slow, it becomes a way of life because people adapt to it. Asthma patients have a history of symptoms variable over time – often at night – or a history of identifiable triggers such as exercise, temperature changes or exposure to pets.

4. Don't forget the past

There is often a patient history (or past medical record history) that will help. Not uncommonly, people with asthma will have presented with quite varied symptoms in the past, including a possible documentation of marked variability in peak expiratory flow rate or a prolonged expiratory wheeze heard upon examination. Research informs us that many of our patients have presented with "another episode of bronchitis" several times in their past, before the correct diagnosis is finally made. Furthermore, it has been found that our patients may have been prescribed inhalers in the past without having been given a formal diagnosis.

5. Watch out for unusual features to the history – don't ignore them!

People who have a cough with blood (haemoptysis) or swollen ankles may also have many features of asthma or COPD. However, unusual features should make us think of other conditions that can cause symptoms that may mimic other common respiratory conditions. Examples include lung cancer and heart failure, but, of course, aside from asthma and COPD, there are many other causes of haemoptysis and ankle swelling as well.

6. Time is important in making an accurate diagnosis – we don't always need to rush

Occasionally, it takes time to arrive at a robust diagnosis and, hence, the correct long-term treatment for asthma or COPD. Many clinicians will have examples of when a confident diagnosis has proven incorrect, given the luxury of time to reflect and observe response to treatment. Take, for example, the person for whom the diagnosis suggests COPD, but who has a slightly atypical history, e.g. being of a young age, or having smoked less frequently than expected; treatment with an inhaled corticosteroid to treat airways inflammation may show a return to normal lung function, but only over time, indicating that the correct diagnosis

is asthma, not COPD. Additionally, consider the patient with mild or variable symptoms of asthma with normal test results, who shows improvement over the course of 6–8 weeks' treatment. If we communicate with our patients that it takes time to make a robust diagnosis, so therefore they are prescribed the long-term treatment that is right for them, they will understand.

7. Don't forget a 'social' history

Our jobs (past and present), our hobbies, our home situation and our pets can all contribute to our health; this is important to consider in many respiratory conditions. Similarly, a carefully taken history on smoking may also identify other inhaled substances which may potentially cause more harm to the lung than tobacco.

8. Clinical examination remains vital – don't just rely on tests

Examination will occasionally identify clubbing (a sign of potential lung cancer or chronic lung infection) and, more commonly, nicotine staining, but many other things, such as kyphoscoliosis, unexpected localised wheeze or evidence of pleural effusion, may be revealed. Even simply taking the pulse can identify atrial fibrillation or other arrhythmias that can certainly make a patient feel breathless. Guidance on asthma and COPD all recommend careful clinical examination and evaluation prior to making a diagnosis, and this examination is also vital to help in assessing or ruling out other potential causes of the symptoms present, such as allergic rhinitis or heart failure.

9. Think about appropriate tests and ask for a further opinion

With asthma, we may be looking at peak flow diaries, fractional exhaled nitric oxide, spirometry with reversibility testing, eosinophil counts and allergen tests – and, with COPD, post-bronchodilator spirometry, a chest X-ray and full blood count. There are, however, a variety of other tests: we should have in mind, for example: alpha 1 antitrypsin levels (for younger people with COPD or older people with COPD who have never smoked); pro-BNP levels (if suspected heart failure); electrocardiograms; echocardiography; and CT scans. If the picture is confusing or atypical, or if you are uncertain – don't be afraid to ask for a further opinion. This may be from a clinician with more experience in diagnosis or, if you are fairly certain of the organ that is affected, a specialist in that area, such as a respiratory/cardiology/mental health specialist.

10. My treatment is not working as I expected – go back to 1. Don't assume a previous diagnosis is correct

Most people with asthma respond well to asthma treatment, and most people with COPD improve, if symptomatic (to an extent), with bronchodilation. If your patient does not have the improvement you expect – think again and work through the process.

Further reading

Asthma: diagnosis, monitoring and chronic asthma management. NICE guideline [NG80] 2017

British guideline on the management of asthma. British Thoracic Society/Scottish Intercollegiate Guideline Network (BTS/SIGN) guideline 153. 2016

From the Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2017

Asthma Guidelines in Practice – A PCRS-UK Consensus. *Primary Care Respiratory Update 2018*

Treatment guidelines for COPD – Going for GOLD? *Primary Care Respiratory Update 2018*