

This is a basic guide to the assessment of adults presenting with breathlessness for  $\geq 4$  weeks

## ASK

- When did the breathlessness start?
- What causes it?
- What relieves it? • Any episodes at night?
- Can the patient walk up a flight of stairs?
- Are there any associated symptoms?
- PMH • Occupational and environmental
- Medication • Smoking history in pack years

## ASSESS

- Respiratory rate and pattern
- SpO<sub>2</sub>
- Respiratory and cardiac examination
- Body mass index
- Position of patient
- Blood pressure
- Pulse (rate & rhythm)
- Temperature
- Finger clubbing

## RED FLAGS:

- Unexplained weight loss, night sweats
- Haemoptysis
- Rapid or slow respiratory rate
- SpO<sub>2</sub> <92% in healthy individual or <88% in patients with known chronic lung disease
- Pulse rate <40 >100 bpm
- Silent chest or confusion

## Symptoms & Assessment

- Breathlessness on exertion, nocturnal dyspnoea, orthopnea
- Ankle oedema, raised JVP, fine creps in lung bases
- CXR & ECG may be abnormal. NTproBNP will be elevated

- Progressive exertional breathlessness
- BMI >30, examination otherwise may be normal, consider sleep apnoea

- Progressive breathlessness associated with exertion, smoking history ( $\geq 10$  pack years) • Chest sounds may be abnormal
- Spirometry obstructive, CXR may be abnormal, oxygen saturations may be low

- Exertional breathlessness
- May present with palpitations, pre-syncope / syncope, fatigue
- ECG abnormal, check thyroid function

- Progressive exertional breathlessness, fatigue
- Pale, may have lemon tinge or jaundice
- Hb low, MCV low, arrange ferritin, B12 & folate

- Breathlessness variable in intensity and timing, associated with history of atopy
- May have wheeze in lung fields, examination may be normal
- CXR / spirometry may be normal, may have raised eosinophils

- Anxiety or depression, tingling around face & hands, voice changes, a sensation of difficulty with inspiration
- Depression & anxiety screening questionnaires may be positive

- Unexplained breathlessness on minimal exertion, 'silly cough', exposure to asbestos / birds / coal / silica
- Finger clubbing, "velcro" creps in lung fields
- Spirometry may be normal OR restrictive

- Progressive exertional breathlessness
- May present with exertional chest pains and or syncope
- Heart murmur likely

- Gradual increase in breathlessness, persistent cough (> 3 weeks), haemoptysis, hoarseness, chest or shoulder pain, weight loss, smoking history • Finger clubbing, lymphadenopathy, abnormal lung field signs • Arrange urgent CXR

- History of PE / DVT / pleuritic chest pains / recent surgery / immobility / pregnancy / malignancy / obesity / IV drug user / recent long haul travel
- SpO<sub>2</sub>: low or normal,  $\uparrow$  pulse rate
- Chest signs and ECG may be abnormal

## Possible Diagnoses

### Heart Failure

- Causes include IHD, Hypertension, AF and other arrhythmias, valvular heart disease • Arrange/refer for echocardiogram
- Refer to [NICE heart failure guidelines](#)

### Obesity / Deconditioning

- Consider lifestyle advice, referral to local health trainers / obesity services
- Consider co-morbidities e.g. diabetes
- If Epworth is >10 then refer to sleep assessment service

### COPD

- Arrange diagnostic spirometry
- Refer to [NICE COPD guidelines](#)

### Arrhythmias

- Most common AF, Bradycardia
- Refer to [NICE arrhythmias guidelines](#)
- Refer for cardiology opinion where appropriate

### Anaemia

- Investigate potential causes

### Asthma

- Arrange PEFR diary • Spirometry with reversibility
- Refer to [BTS SIGN asthma guidelines](#)

### Dysfunctional Breathing

- Examples include vocal cord dysfunction and hyperventilation
- Assess Nijmegen score if >23 refer to dysfunctional breathing services
- Consider CBT / psychological therapies: [www.physiohypervent.org](http://www.physiohypervent.org)

### Lung Fibrosis

- Arrange CXR
- Refer to pulmonary specialist
- Consider spirometry

### Cardiac Valve Disease

- Arrange / refer for echocardiogram
- Refer for cardiology opinion where appropriate

### Lung Cancer

- Urgent referral to lung cancer service
- See [NICE guidance on urgent lung cancer referrals](#)

### Chronic Pulmonary Emboli

- Refer to acute services
- If D-dimer negative, young patient or recent viral injury: consider pericarditis (saddleback changes on ECG)

**THESE ARE COMMON CAUSES OF BREATHLESSNESS. OTHERS EXIST AND CONDITIONS MAY COINCIDE. A REFERRAL IS NECESSARY IN THE ABSENCE OF A DEFINITIVE DIAGNOSIS**