Adult Breathlessness Pathway

Key
Green text – test type
Blue box - test results
Orange box – referrals/ end point

Routes into Pathway

Patient presents with symptoms

Clinical Assessment - History

Symptoms – question how long symptoms have been present, what the variability is, whether there is a pattern (day vs night) and how other symptoms occur

Cough
Sputum/ haemoptysis
frequency/ quantity/ colour

Breathlessness
Orthopnoea
Nocturnal symptoms
Wheeze

General
Weight loss
Oedema
Palpitations/ syncope

Non Specific
Tingling sensations
Obstructive sleep apnoea (e.g. apnoae, snoring, unrefreshed sleep)
Age
Smoking status
Family history
Atopy

Additional Info Pop Up

Palpitations is sensation of heart beating may be quick, normal or slow.

Clinical Assessment - Examination

General
Pale
Clubbing
Sats/ BP/ pulse
Peak flow rate
BMI
Resp Rate
Rockwood scale

Cardiac
Heart sounds
Raised JVP/ peripheral oedema

Respiratory
Chest exam
Chest wall and spinal shape
Chest wall movements

Urgent Referral and Admission Guidance

Urgent Referral

*Syncope & either murmur or palpitations

Suspected Lung Cancer Referral
Refer people using a suspected cancer pathway referral (for an appointment within 2 weeks) for lung cancer if they:
Have chest X-ray findings that suggest lung cancer, or
Are aged 40 years and over with unexplained haemoptysis

Admission Pop Up
Very unwell with (for example) high fever, low BP, high pulse, low sats (<93% or lower than normal for chronic lung disease patients) combined with (for example)
Suspected renal failure
Suspected DM Ketoacidosis

Clinical Assessment – Diagnosis Suggestions

Suggestion of Cardiac

History
Orthopnoea
Syncope*
Angina/ chest pain

Examination
Raised JVP
S3
Murmur
Bibasal fine crackles
Peripheral Oedema

Suggestion of Respiratory

History
Cough (especially productive or nocturnal)
Variation in symptoms
Smoking
Wheeze
Haemoptysis

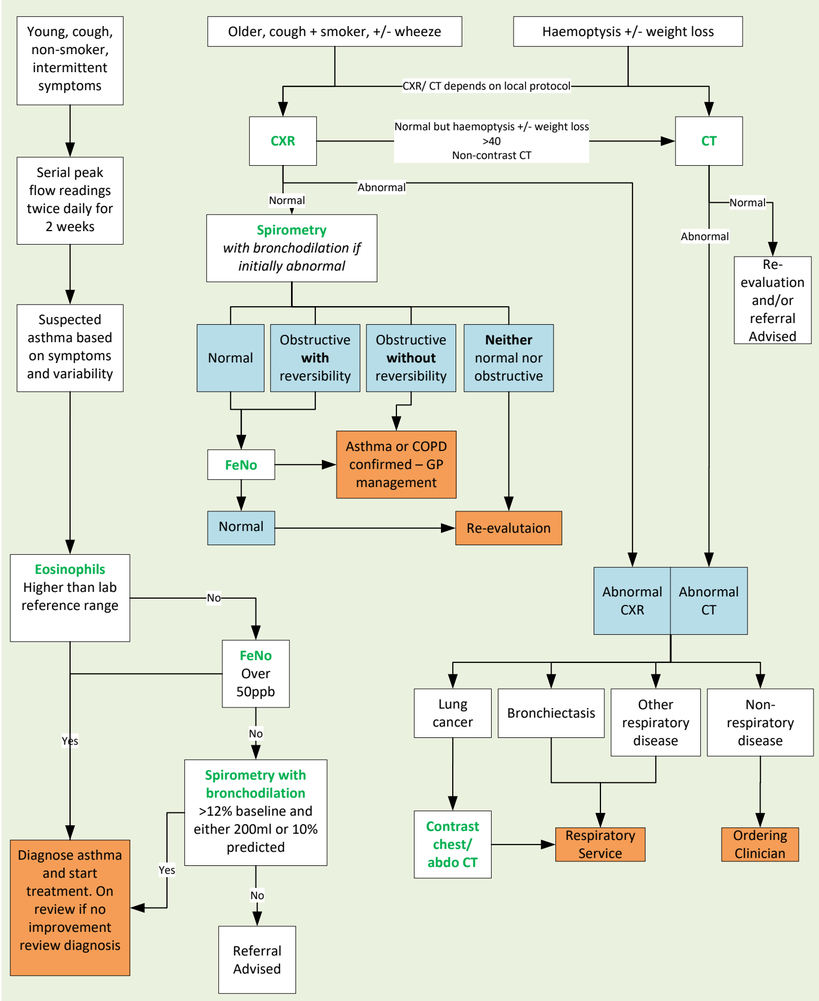
Examination
Reduced PEFR
Reduced Oxygen Sats
Clubbing
Wheeze
Crackles – esp coarse or leathery

Alternative Diagnosis

Consider non cardiac and Respiratory Causes
OSA
Anaemia
Diabetes
Renal Failure
Thyroid Disorders
Frailty
Deconditioning

Investigations – *select all appropriate based on clinical assessment*
Breathlessness can be multi-factorial
Consider the findings from History and examination when requesting investigations.
Multiple findings may require more than 1 set of investigations.

Suspected Respiratory Aetiology



Investigations – *select all appropriate based on clinical assessment*
Breathlessness can be multi-factorial
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Suspected Cardiac Aetiology

NT-proBNP raised & signs/ symptoms of heart failure
Heart murmur heard

NICE have selected the cut-off level of 400ng/L to provide a relatively high specificity. Age related cut-offs can improve sensitivity:
In patients less than 50 years of age, NT-proBNP less than 50ng/L provides a very high sensitivity to rule out heart failure
In patients 50-75 years of age, NT-proBNP less than 75ng/L provides high sensitivity
In patients over 75 years, use of the 400ng/L cut off is adequate

CXR/ ECG/ Echo

HF diagnosis supported → Cardiology

Valvular disease/ IHD or pulmonary hypertension → Cardiology

Rhythm abnormality → Non- AF / AF

Non- AF → Cardiology

AF → GP

Normal +/- normal age related changes → Re-evaluation

Additional Info

Interpretation of natriuretic peptide levels

Natriuretic peptide levels may be reduced by:
- Body mass index (BMI) greater than 35 kg/m2.
- Drugs including diuretics, angiotensin-converting enzyme (ACE) inhibitors, angiotensin-II receptor antagonists (AIIRAs), beta-blockers, and mineralocorticoid receptor antagonists (such as spironolactone).
- African-Caribbean family origin.

Natriuretic peptide levels may be elevated by:
- Age over 70 years.
- Left ventricular hypertrophy, myocardial ischaemia, or tachycardia.
- Right ventricular overload.
- Hypoxia.
- Pulmonary hypertension.
- Pulmonary embolism.
- Chronic kidney disease (estimated glomerular filtration rate less than 60 mL/min/1.73 m2).
- Sepsis.
- Chronic obstructive pulmonary disease (COPD).
- Diabetes mellitus.
- Liver cirrhosis.

CKS NICE Guidance

Additional Info Pop Up
Refer to rhythm disturbance pathway

Alternative Diagnosis

FBC UE/eGFR TSH LFT

OSA
STOPBang → Refer to Sleep Services

Anxiety
Nijmegen Questionnaire → Primary Care Management

Additional Info Pop Up
British Snoring Questionnaire
STOPBang Questionnaire

Additional Info Pop Up
FBC if suspected anaemic
U/E if suspected renal
TSH if suspected thyroid disorder
LFT if suspected high cardiac output

Additional Info Pop Up
Njimegen Questionnaire

Cut off for hyperventilation on Nijmegen Questionnaire is 23/63