

Adult Asthma Diagnosis Guideline



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CORE PRINCIPLES IN ADULTS

The diagnosis of asthma is a clinical diagnosis supported by tests of airway obstruction and inflammation.

STEP 1: ASSESSMENT

Asthma likelihood checklist

- Episodic cough
- Episodic wheeze (particularly observed by HCP)
- Chest tightness
- Breathlessness
- Diurnal variation, symptoms worse at night/morning
- Triggers including allergens, exercise, cold air
- Associated rhinitis, atopy (hay fever, eczema)
- Childhood asthma or family history asthma

STEP 1 INFORMATION: ASSESSMENT

1 Consider differential diagnoses/co-morbidities

Consider conditions that may mimic asthma:

- Obesity or poor fitness
- Anxiety or hyperventilation
- Chronic obstructive pulmonary disease
- Gastro-oesophageal reflux disease
- Upper airway abnormalities
- Bronchiectasis
- Heart failure

STEP 2 INFORMATION: PERFORM INVESTIGATIONS

1 Spirometry and bronchodilator reversibility

Perform baseline spirometry (pre-bronchodilator)

Asthmatics may have normal spirometry when well

If pre bronchodilator spirometry shows obstruction (FEV1/FVC ratio below 0.7 OR LLN) perform reversibility

STEP 2: PERFORM INVESTIGATIONS

Demonstrate evidence of variable airflow obstruction (+/- airway inflammation)

1

Spirometry and bronchodilator reversibility

2

Peak flow diary

3

Exhaled nitric oxide (FeNO)
(Where available)

1 Peak flow diary

Complete 2 week peak flow diary (a single peak flow is inadequate)

1 Exhaled nitric oxide (FeNO)

Note: High FeNO is not diagnostic for asthma and has other causes e.g. rhinitis

A negative test does not exclude asthma

Use flow charts for asthma diagnosis as per NICE NG80 where FeNO is available

STEP 3: DIAGNOSIS



Start treatment

Consider:

- Alternative diagnosis
- Repeat objective tests
- Referral to secondary care asthma clinic

STEP 4: REVIEW

Ensure patient has expected response to therapy - if poor response re-consider diagnosis, compliance and inhaler technique

STEP 3 INFORMATION: DIAGNOSIS

1 Strong clinical impression

Strong clinical impression (step 1) with objective evidence to support the diagnosis, as demonstrated by one of:

- 1 A positive bronchodilator reversibility test is defined as an increase in FEV1 of 12%, in response to bronchodilator therapy
- 2 Evidence of 20% peak flow variability supports a diagnosis of asthma
- 3 FeNO >40ppb is defined as a positive result in adults (who have not received steroid therapy)

Start treatment

- Low dose ICS
- Inhaler technique and correct spacer
- Personalised asthma action plan
- Document triggers
- Smoking cessation
- Advice on Flu vaccination
- Advice on weight

STEP 4 INFORMATION: REVIEW

1 Review

- Review annually if asthma well controlled
- Review after 3 months if any change to treatment or exacerbation/sub-optimally controlled symptoms
- Consider stepping down if well controlled



FeNO: Fractional Expired Nitric Oxide
FEV1: Forced Expiratory Volume in one second
FEV1/FVC ratio: Forced Expiratory Volume in one second over Forced Vital Capacity represented as a ratio
ICS: Inhaled Corticosteroid
LLN: Lower Limit of Normal
Pre BD: Pre bronchodilator

