


CORE PRINCIPLES IN ADULTS

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

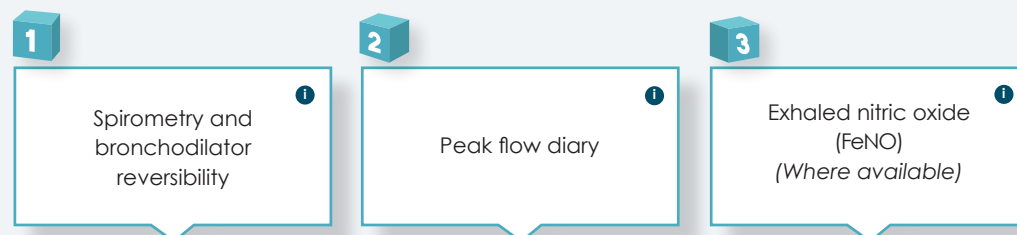
STEP 1: ASSESSMENT

Asthma likelihood checklist

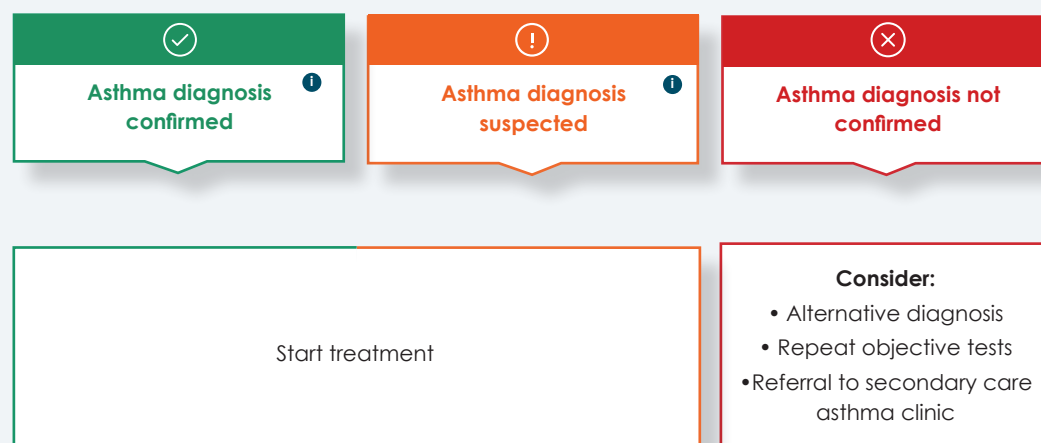
- ✓ Episodic cough
- ✓ Episodic wheeze (particularly observed by HCP)
- ✓ Chest tightness
- ✓ Breathlessness
- ✓ Diurnal variation, symptoms worse at night/morning
- ✓ Triggers including allergens, exercise, cold air
- ✓ Associated rhinitis, atopy (hay fever, eczema)
- ✓ Childhood asthma or family history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

STEP 2: PERFORM INVESTIGATIONS

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



STEP 3: DIAGNOSIS



STEP 4: REVIEW

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

STEP 1 INFORMATION: ASSESSMENT

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 3 INFORMATION:
DIAGNOSIS

i Strong clinical impression

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

- 1 Evidence of 20% peak flow variability supports a diagnosis of asthma
- 2 A positive bronchodilator reversibility test is defined as an increase in FEV1 of 12%, in response to bronchodilator therapy
- 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 2 INFORMATION:
PERFORM INVESTIGATIONS

Spirometry and bronchodilator reversibility

Perform baseline spirometry
off inhaled therapy 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

- **Peak flow diary**

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

i 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 4 INFORMATION: REVIEW

i 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
 Fored Vital Capacity represented as a ratio
ICS: Inhaled Corticosteroid
LLN: Lower Limit of Normal
Pre BD: Pre bronchodilator