

Why Asthma still kills !

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Diagnosis ?

Diagnosis is a clinical one

There is an absence of consistent gold-standard diagnostic criteria

Symptoms are central to all definitions : > 1 of wheeze/ breathlessness/ chest tightness / cough and recently: airway hyper-responsiveness and inflammation.

Tests influence the probability but do not prove the diagnosis.

Variability of symptoms and tests

Options for investigations

- Variability : Reversibility
 - PEF charting
 - challenge tests
- Tests for airway inflammation/ atopy:
 - FeNO
 - Blood eosinophils
 - Skin prick tests / IgE

High Probability on initial structured clinical assessment

- Commence a monitored initiation of treatment (6 weeks of inhaled corticosteroids)
- Assess status with a validated symptom questionnaire + / or lung function tests (FEV1 or domiciliary serial peak flows)
- With good symptomatic and objective response to treatment , confirm the diagnosis and record the basis on which the diagnosis was made
- If response is poor or equivocal , check inhaler technique and adherence , arrange further tests and consider alternative treatment .

Aim of asthma management is control of disease .

- No daytime symptoms
- No night awakening
- No need for rescue medication
- No asthma attacks
- No limitation on activity
- Normal lung function(FEV1 and / or PEFD > 80% predicted or best)
- Minimal side effects from medication

Before initiating a new drug therapy

- Check adherence with existing therapies
- Check inhaler technique
- Eliminate trigger factors

Exercise induced asthma

- For most patients , exercise induced asthma is an expression of poorly controlled asthma and regular treatment including inhaled corticosteroids should be reviewed.

Combination inhalers

- Guarantee that the long – acting B2 agonist is not taken without inhaled corticosteroid
- Improve inhaler adherence
- Prescribe inhalers only after patients have received training in the use of the device and have demonstrated satisfactory technique

Follow up after an acute admission for asthma :

- Essential that the patient's primary care practice is informed within 24 hrs of discharge from ER or hospital following an asthma attack
- Keep patients who have had a near fatal asthma attack under specialist supervision indefinitely .
- A respiratory specialist should follow up patients admitted with a severe asthma attack for at least a year after the admission.

Difficult asthma

- Persistent symptoms and / or frequent asthma attacks despite treatment with high dose therapy
- *Assessment* : confirm the diagnosis and identify the mechanisms of persisting symptoms and assessment of **adherence to therapy**. Consider coexistent psychological morbidity.
- Consider monitoring induced sputum eosinophil counts to guide steroid treatment.

National Review of asthma deaths

NRAD . RCP 2014

Organisation of NHS services

- Designated Hospital and GP clinical lead / training
- Refer to a specialist asthma service if required more than 2 courses of systemic steroids in the previous 12 months or BTS stepwise 4/5 .
- Follow up arrangements after every A and E attendance and secondary care FU for every admission or x2 ER admissions in 12 months
- Standard national asthma template for a structured review re documentation and audit .
- Electronic surveillance of primary care prescribing to alert to excessive SABA use or too few preventers .
- National asthma audit

Medical and Professional care

- All asthma patients should have a PAAP (personalised asthma action plan) detailing their triggers current treatment and how to prevent relapse and when to seek help.
- All asthma patients should have a structured review by a specialist trained in asthma annually. More frequently if high risk .
- Triggers should be elicited and documented so that measures can be taken to reduce their impact.
- Health professionals should be aware of the features that increase the risk of asthma attacks and death including psychological and mental health issues .

Prescribing and medicines use

12 SABA in 12 months should have an urgent review .
Focus on those on higher dose therapies , those with acute asthma attacks and groups with more complex needs

Inhaler technique check and documented at annual review
Pharmacist check when new device dispensed

Non adherence to preventer inhaled steroids ...increased risk of poor asthma control and should be monitored.

The use of combination inhalers should be encouraged . If a LABA is prescribed then it should be prescribed with an inhaled corticosteroid in a single combination inhaler .

Patient factors and perception of risk

Patient self management encouraged to reflect known triggers eg hay fever season , avoiding NSAID or early use of oral corticosteroids with viral / allergic induced exacerbations .

Document smoking history . Offer smoking cessation services .

Education for patients, parents and children re how/ why and when they should use their asthma medications , recognising when it is not controlled and knowing when to seek emergency advice .

Minimise exposure to allergens and smoke.