Confirming a previous diagnosis of asthma in adults and adolescents

Before starting treatment

- Diagnosing asthma in adults and adolescents

Recommendation

In patients with a diagnosis of asthma made elsewhere or in the past, confirm variable airflow limitation from historical medical records or spirometry.

If a patient with a diagnosis of asthma reports typical variable respiratory symptoms but variable airflow limitation has never been documented, obtain objective evidence by spirometry.

Consider either of the following methods:

- Perform or arrange spirometry with bronchial responsiveness test at a time when symptoms are present, or after withholding bronchodilators.
- Perform spirometry at each visit and measure difference in FEV_1 between visits. The greater the difference, the more likely it is that symptoms are due to asthma.

Sources & rationale

Recommendation type: Adapted from GINA

High rates of overdiagnosis of asthma in adults have been reported among community and primary care samples.[Aaron 2018]

Objective evidence of variable airflow limitation is needed to confirm symptoms are more likely due to asthma than an alternative diagnosis.

If the patient is not already using ICS, a clinically significant increase in pre-bronchodilator FEV_1 (≥ 200 mL and ≥12%) measured before and after 4 weeks' maintenance treatment with ICS (or ICS-LABA) confirms the presence of variable airflow limitation.[GINA 2025]

References

Aaron SD, Boulet LP, Reddel HK, Gershon AS. Underdiagnosis and overdiagnosis of asthma. Am J Respir Crit Care Med 2018; 198: 1012-1020.

Global Initiative for Asthma (GINA). Global Strategy for Asthma Management and Prevention, 2025. Available from: www.ginasthma.org

Notes

Standard withholding times for bronchodilators before spirometry:[GINA 2025]

- ≥ 4 hours for salbutamol or terbutaline
- ≥24 hours for formoterol or salmeterol
- ≥36 hours for indacaterol, olodaterol, or vilanterol
- 36–48 hours for aclidinium, glycopyrronium, tiotropium, or umeclidinium

Consideration

If a prior asthma diagnosis is in doubt in a patient using ICS-based treatment, and historical or current variable airflow limitation cannot be confirmed, investigate according to symptoms.

If the patient has current respiratory symptoms, consider referring to a specialist for assessment.

If the patient has no current respiratory symptoms and normal lung function, the ICS dose can be reduced or stopped for 2–4 weeks before spirometry with bronchodilator responsiveness test (and FeNO test, if available) or a bronchial provocation test. If symptoms re-emerge after reducing ICS, this supports the diagnosis of asthma. If the diagnosis of asthma cannot be confirmed, investigate alternative diagnoses or refer for specialist assessment.

Sources & rationale

Recommendation type: Consensus recommendation