ALLERGIC AND HYPERSENSITIVITY CONDITIONS IN NON-SPECIALIST CARE: FLOW-DIAGRAMS TO SUPPORT CLINICAL PRACTICE

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Abstract

Most patients presenting with allergies are first seen by primary care health professionals. The perceived knowledge gaps and educational needs were recently assessed in response to which the LOGOGRAM Task Force was established with the remit of constructing pragmatic flow-diagrams for common allergic conditions in line with an earlier EAACI proposal to develop simplified pathways for the diagnosis and management of allergic diseases in primary care. To address the lack of accessible and pragmatic guidance, we designed flow-diagrams for five major clinical allergy conditions: asthma, anaphylaxis, food allergy, drug allergy and urticaria. Existing established allergy guidelines were collected and iteratively distilled to produce five pragmatic and accessible tools to aid diagnosis and management of these common allergic problems. Ultimately, they should now be validated prospectively in primary care settings.

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dizziness, light-headedness or peripheral tingling (paresthesia)

Positive reversibility or variability test if:
- Increase in FEV1 of >12% and FVC>200 mL from baseline, 15 minutes after ≥400 mcg albuterol or equivalent (greater confidence if increase is ≥15% and ≥400 mL)
- Average daily diurnal PEF variability ≥10%* (over 2 weeks)
- Increase in FEV1 by ≥12% and FVC>200 mL (or PEF1 by ≥20%) from baseline after 4 weeks of anti-inflammatory treatment, outside respiratory infections
- Fall in FEV1 of ≥10% from baseline during exercise test
- Fall in FEV1 from baseline of ≥20% with standard doses of methacholine or histamine ≥15% with mannitol

Alternative diagnoses [not exclusive]:
- Rhinitis (without asthma)
- Upper airways infection
- COPD
- Vocal cord dysfunction
- Exercise induced laryngial obstruction
- Dysfunctional breathing
- Symptoms due to overweight
- Gastroesophageal reflux disease
- Pancreatitis
- Laryngitis
- Cardiac disease
- Cystic fibrosis
- Bronchiectasis

Interpretation biomarkers:
- FeNO positive when: >50ppb in adults (FeNO >35ppb in children)
- High levels specific IgE (>0.35 ku/l) may support the diagnosis of asthma
- Higher levels of blood eosinophils increase the likelihood of asthma and ICS response.
- medium, high >350 10^9/mm^3; very high (>600 10^9/mm^3) --> referral.

Review management effect
- Review after 2-4 weeks
- Structured review (for example SIMPLES^2) of the patient with asthma until control is achieved
- If control is not achieved having covered all items: review diagnosis
- Be prepared to change diagnosis
- Refer to therapy resistant asthma clinic

1. Gina 2020: https://ginasthma.org/gina-reports/gina-2020-full-report_final_enms/
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3. Ryan D, Murphy A, Stallberg B, Baxter N, Heaney LG. ‘SIMPLES’: a structured primary care approach to adults with difficult asthma. Primary Care Respiratory Journal. 2013 Sep;22(3):365-73.

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ANNEX 2-Anaphylaxis.pdf available at https://authorea.com/users/325303/articles/544574-allergic-and-hypersensitivity-conditions-in-non-specialist-care-flow-diagrams-to-support-clinical-practice

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