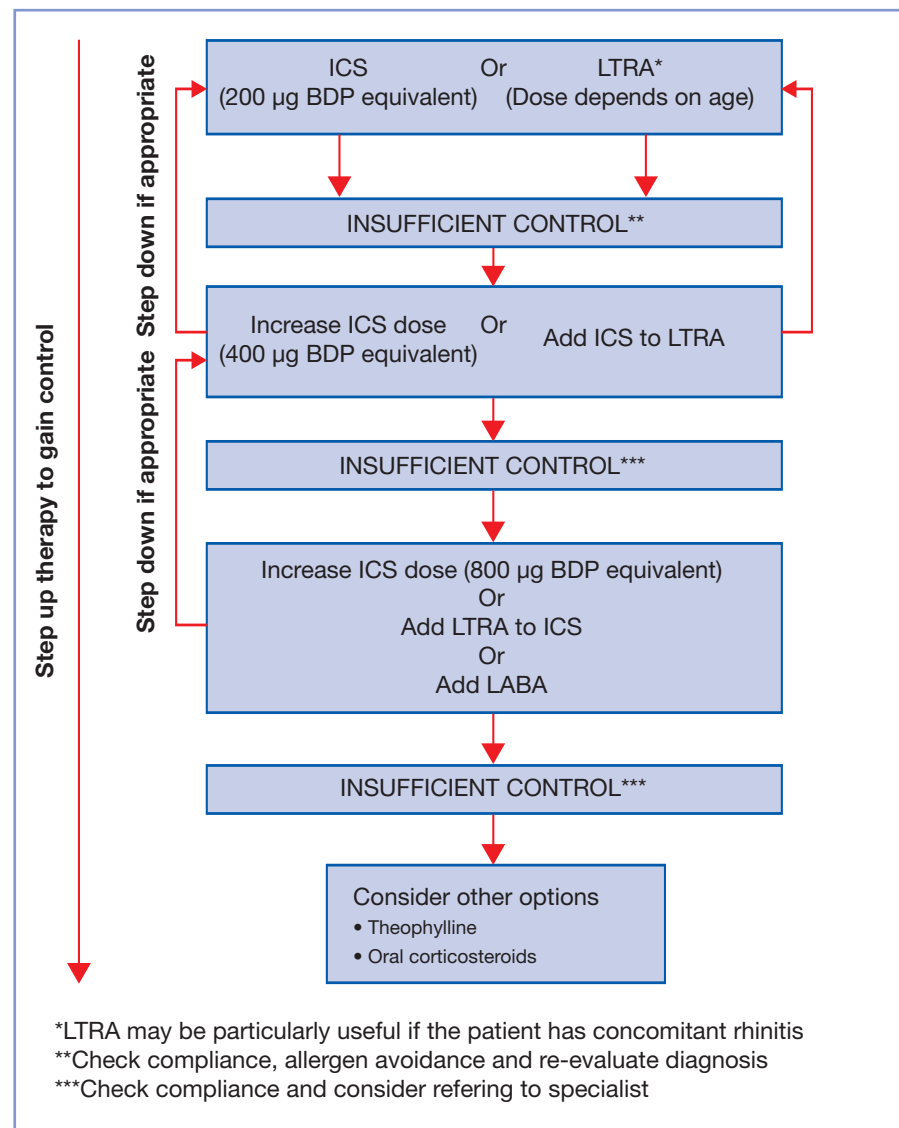


Algorithm of preventive treatment for asthma in children >2 years of age



Diagnosis and treatment of asthma in childhood

PRACTALL EAACI/AAAAI Consensus Report: *Pocket Guide*



Adapted from Bacharier LB et al. Diagnosis and treatment of asthma in childhood: a PRACTALL consensus report. *Allergy* 2008;63:5–34.

Rationale

Asthma is the leading chronic disease among children in most industrialised countries. However, the evidence base on specific aspects of paediatric asthma, including therapeutic strategies, is limited and no recent international guidelines have focused exclusively on paediatric asthma.

The European Academy of Allergy and Clinical Immunology (EAACI) and the American Academy of Allergy, Asthma and Immunology (AAAAI) nominated expert teams to find a consensus to serve as a guideline for clinical practice in Europe as well as in North America. The report is part of the PRACTALL initiative[†], which is endorsed by both academies.

The report reviews the natural history and pathophysiology of paediatric asthma and provides recommendations for diagnosis, practical management and monitoring.

The PRACTALL consensus report is the first broad diagnosis and treatment guidance developed by paediatric respiratory specialists for practitioners who treat children.

[†]PRACTicing ALLergy. This PRACTALL program on asthma in childhood is supported by an unrestricted educational grant from Merck Co. Inc. under the auspices of Charité University of Berlin.

Summary of Key Recommendations

Natural History/Diagnosis

- Careful evaluation and recognition of asthma triggers is important in patient education, environmental control and prognosis
- Identification of asthma phenotype (e.g. viral-induced asthma, allergic asthma and activity-induced symptoms) should be always attempted, including evaluation of atopic status
- Allergen testing (at all ages) is important to confirm the possible contribution of allergens to asthma activity

Pharmacotherapy/Immunotherapy/Education

- Treatment of airway inflammation leads to optimal asthma control
- Exercise should not be avoided; asthmatic children should be encouraged to participate in sports, with efficient control of asthma inflammation and symptoms
- Inhaled steroids (ICS) are a first-line treatment for persistent asthma. Atopy and poor lung function predict a favourable response to ICS. New evidence, however, does not support a disease-modifying role after cessation of treatment with ICS in pre-school children
- LTRA are an alternative first-line treatment for persistent asthma. Younger age (<10 years) and high levels of urinary leukotrienes predict a favourable response. Suggested as treatment of virus-induced wheeze
- Until further evidence of effectiveness and long-term safety are available, LABAs should not be used without an appropriate ICS dose
- Consider immunotherapy with appropriate allergens for allergic asthma and within the licensed indications only when the allergenic component is well documented and reliable allergen extracts are available
- Asthma education is an integral part of asthma management and must be offered to all parties involved

Monitoring

- Signs and symptoms: Ask targeted, age-specific questions with respect to asthma symptoms, adherence (compliance) and asthma exacerbations
- In the clinic setting, spirometry – particularly FEV₁/FVC ratio and mid-expiratory flow – has a role in detecting unrecognised airflow obstruction
- eNO is a simple test that is helpful in evaluating eosinophilic airway inflammation in childhood asthma