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Non-Specialist Allergic Rhinitis Treatment Pathway for Children (<16 years of age)

Suspected Allergic Rhinitis with no red flag signs[1, 2] (see notes)

Mild rhinitis with no impact on quality of life (e.g. sleep, school attendance, studying)

Moderate or severe rhinitis impacting on quality of life

- Start an age-appropriate daily non-sedating antihistamine[3]
- Double the anti-histamine dose if symptoms are not controlled [4]
- Consider nasal saline douching [5]

Improved?

Poor response after 2 weeks of treatment?

- Start a regular, daily steroid nasal spray with a low systemic absorption [6,7]
- Ensure correct nasal spray technique and treatment compliance. [8] If use of one nasal spray device is difficult or problematic, consider starting an alternative nasal spray device
- Advise nasal saline douching [5]
- Continue a daily non-sedative antihistamine (with a double dose if necessary)
- Ensure optimal asthma control (if applicable)
- See the supplementary text box for the management of allergic conjunctivitis

Improved?

Poor response after a further 4 weeks of treatment? → Add an anti-leukotriene receptor antagonist (e.g. montelukast nocté [9]) to the treatment regime

Poor response after a further 4 weeks of treatment?

- If over 12 years of age, start an alternative, second line steroid & antihistamine combination nasal spray (e.g. fluticasone proprionate and azelastine combination nasal spray). Continue high dose anti-histamine

Continue treatment regime

Improved?

Poor response after a further 4 weeks of treatment?

Consider referral to ENT for further investigation and diagnosis (e.g. nasal endoscopy) if under 6 years of age with significant sleep disordered breathing

Allergic Rhinitis and poor response to treatment with maximal medical allergic rhinitis therapy

Consider referral to Sheffield Paediatric Allergy for further investigations and possible allergen desensitisation

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Notes

1) **Red flag symptoms would be unilateral symptoms, polyps, persistent purulent discharge or blood staining, or symptoms suggestive of acute severe rhinosinusitis. This condition that can be life threatening and is characterised by the sudden onset of two or more symptoms, one of which should be either nasal blockage/obstruction/congestion or thick nasal discharge. Additional symptoms include facial pain or pressure, reduction or loss of smell and/or headache. If high fever and displaced eyeball are present urgent referral to the acute admissions unit is warranted.**
2) **Allergic rhinitis triggers include seasonal allergens (grass, tree and weed) pollens and moulds as well as perennial allergens (house dust mites, animal dander). Allergy testing does not change the initial management and would not be required at this stage. However consider allergen avoidance measures if a culprit allergen is suspected (e.g. for example house dust mite reduction measures, pet or pollen avoidance).**
3) **Start an age-appropriate 2nd or 3rd generation non-sedating antihistamine. These include:**

Antihistamine	Age	Dose and Frequency
Cetirizine	2 – 5 years 6 – 11 years 12 – 17 years	2.5 mg twice daily 5 mg twice daily 10 mg once daily
Loratadine	2 – 11 years (weight < 30 kg) 2 – 11 years (> 31 kg) 12 – 17 years	5 mg once daily 10 mg once daily 10 mg once daily
Desloratadine	1 – 5 years 6 – 11 years 12 – 17 years	1.25 mg once daily 2.5 mg once daily 5 mg once daily
Fexofenadine	6 – 11 years 12 – 17 years	30 mg twice daily 120 mg once daily

Avoid the use of 1st generation sedating antihistamines (e.g. chlorphenamine).

4) **This is an off licence dose of antihistamines, however it is well recognised that anti-histamines are frequently given at higher than licensed doses by the Paediatric Allergy clinic (e.g. cetirizine twice daily, loratadine twice daily or fexofenadine twice daily)**
5) **Saline nasal rinse kits are available for the patient to buy; they are not available on the NHS. Further information on nasal douching, including how to make an isotonic douching solution can be found at: https://www.bsaci.org/wp-content/uploads/2019/12/Howtoperformnasaldouching.pdf**
6) **Intranasal steroids have similar clinical efficacy but variable bioavailability. First line steroid nasal sprays with negligible systemic absorption include fluticasone furoate, fluticasone propionate or mometasone furoate. Intranasal corticosteroid systemic absorption is modest with beclometasone diproprionate and high with betamethasone (which should be used short-term only). Onset of action is 6-8 hours after the first dose and maximal effect may not be apparent until after two weeks. Starting treatment two weeks prior to known allergen season improves efficacy. When symptoms are controlled, reduce the nasal spray dose to one spray to each nostril once daily to maintain rhinitis control. Please ensure there are no contraindications to the use of a steroid nasal spray (for example glaucoma).**
7) **For seasonal pollen related rhinitis, start the steroid nasal spray two weeks before the rhinitis symptoms are expected to begin.**
8) **Ensure the patient uses their steroid nasal spray on a daily basis and with the correct technique to maximise its effectiveness and to reduce the risk of nasal crusting, bleeding and pain which can be caused by misapplication of the steroid spray. A BSACI Standard Operating Procedure demonstrating correct nasal spray technique can be found via the following link: https://www.bsaci.org/wp-content/uploads/2019/12/Howtouseanasalspray.pdf**
9) **Montelukast dose: 6 months to 5 years is 4 mg; 6 – 14 years is 5 mg; 15 – 17 years is 10 mg. Parents/children should be counselled regarding potential side effects.**

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Treatment of Allergic Conjunctivitis

- **Use eye drops daily and regularly. Examples include:**
  - **Mast cell stabilising eye drops (e.g. sodium cromoglicate 2% or nedocromil sodium)**
  - **Mast cell stabilising eye drops with antihistaminic properties (e.g. olopatadine)**
  - **Antihistamine eye drops (e.g. azelastine)**
- **If allergic eye symptoms are severe and/or do not improve with treatment, consider referring the patient to the Ophthalmology clinic or A&E emergency eye clinic for further assessment.**

Supplementary Advice

- **These pathways aim to both educate Primary care physicians in the management of rhinitis and to reduce Paediatric Allergy clinic referrals for children who can be successfully managed in the primary care setting.**
- **Injectable steroids are not recommended for the treatment of rhinitis due to the risk of severe side effects (including avascular necrosis of the femoral head).**
- **Short courses of oral steroids (e.g. prednisolone 20mg for 5-10 days) can be considered for rescue therapy for severe rhinitis symptoms.**
- **Avoid chronic use of nasal decongestant medications for >10 days as these are associated with rhinitis medicamentosa (worsening nasal congestion).**
- **Allergen avoidance advice can be beneficial in certain patients when the culprit allergen can be clearly identified (e.g. pet or horse allergy). Other interventions which may help to reduce pollen related rhinitis symptoms include wrap-around sunglasses and ointments applied to the nose.**
- **For profuse watery rhinorrhoea, an ipratropium bromide nasal spray can be prescribed.**
- **Pregnancy: Rhinitis affects at least 20% of pregnancies. During pregnancy, most medications cross the placenta and should only be commenced if the potential benefit outweighs the risk to the foetus. Please contact the CIAU Allergy Clinic if further advice regarding the management of rhinitis in pregnancy is required.**
- **Links to further information:** https://www.bsaci.org/wp-content/uploads/2020/01/Scadding_et_al-2017-Clinical_amp_Experimental_Allergy.pdf