University Hospitals of Derby and Burton NHS Foundation Trust

DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE (JAPC)

Children's referral guideline for Sub-Lingual Immuno Therapy (SLIT) – Grass pollen extract (Grazax) and House dust mite (HDM) extract (Acarizax)

University Hospitals of Derby and Burton NHS Foundation Trust – Derby Children's Hospital

Background

Allergic Rhinitis (AR) affects more than 20% of the population in the UK and Western Europe and represents a major cause of morbidity that includes interference with activities of daily living and impairment of sleep quality.

This guideline is specifically for immunotherapy for pollen and HDM allergy and is for the management of AR in children that have failed to achieve adequate relief of symptoms despite maximal medical therapy. It is not appropriate for the majority of patients with hay fever.

Allergen immunotherapy involves the repeated administration of allergen extracts with the aim of reducing symptoms on subsequent allergen exposure, improving quality of life and inducing long-term tolerance and a reduction in medications required regularly.

Patient Selection

Children will be identified in the specialist paediatric allergy clinics and SLIT only be given to patients who have been identified and reviewed by either Dr Traves or Dr Starkey, the consultants who run these clinics. Patients in general paediatric clinics will not be eligible for SLIT and must be reviewed in the allergy clinic before consideration of starting treatment. Children must be over 5 years of age to receive Grazaxa andAcarizax is licensed for use in children over the age 12. They must have a documented grass/ HDM allergy with positive skin prick tests to grass/ HDM; or positive Specific IgE blood tests to grass/timothy grass/ HDM. GPs are therefore advised to refer to allergy clinic if they have children who fit the criteria below.

Patients who are eligible for SLIT should fulfil the following requirements and be on maximal treatment for allergic rhinitis:

- Patient over the age of 5 years (Grass allergy); over 12 years for HDM allergy
- Documented (seasonal or perennial) allergic rhinitis
  Symptoms include 2 or more below symptoms for more than1 hours on most days
  - Profuse nasal discharge (watery)
  - Nasal obstruction
  - Sneezing
  - Nasal pruritis
  - Conjunctivitis

Patients need to be on Maximal Medical Treatment (MMT) for at least one *season* prior to assessment for possible immunotherapy. MMT would be as follows:

1. Allergen and irritant avoidance measures

2. **Intranasal steroids e.g. trial with at least two of the following for one season:**
Check efficacy at 4-6 weeks, if ineffective consider changing to alternative spray

Drug	Strength	Dose as per BNFc	Comments	INS Bio-availability
Mometasone	50micrograms / metered spray	**Children 3-11 years** 1 spray into each nostril once daily **Children 12-17 years** 2 sprays into each nostril once daily, increased if necessary to 4 sprays into each nostril once daily. Dose to be reduced when control achieved	1st line option	0.5%
Fluticasone furoate (Avamys)	27.5 micrograms/ metered spray	**Child 6-11 years** 1 spray into each nostril once daily in the morning, increased if necessary to 2 sprays into each nostril once daily. Dose to be reduced when control achieved to 1 spray into each nostril once daily **Child 12-17 years** 2 sprays into each nostril once daily in the morning. Dose to be reduced when control achieved.	2rd line option	0.5%

3. **Oral antihistamines:**

Drug	Dose as per BNFc	GP to prescribe prior to referral*	Comments
Cetirizine 10mg tablets or 5mg/5ml oral solution	**Child 2-5 years**- 2.5mg twice daily	2.5mg can be given up to three times daily	Paediatric allergy clinic patients might be titrated to four times a day dosing by the consultant
	Child 6-11 years- 5mg twice daily	5mg can be given up to three times daily	
	Child 12-17 years- 10mg once daily	10mg can be given two to three times daily	
Loratadine 10mg tablets or 5mg/5ml oral solution SF	**Child 2-11 years** Body-weight up to 31kg- 5mg once daily Body-weight 31kg and above- 10mg once daily	Dose as per age & body-weight can be given twice daily	
	Child 12-18 years- 10mg once daily		

*off-license dosing as recommended by consultants

4. **Montelukast**

Age	Dose as per BNFc	Comments
Child 6 months-5 years	4mg once daily in the evening	Doses for prophylaxis of asthma but consultants support the use of montelukast off-license for allergic rhinitis
Child 6-14 years	5mg once daily in the evening	
Child 15-17 years	10mg once daily in the evening	

5. **If eye symptoms are significant** (fluticasone furoate nasal spray would be the most appropriate nasal spray in these patients as it has a good effect on eye symptoms):

Drug	Strength	Dose as per BNFc	Comments
Sodium cromoglicate	2% eye drops	1 drop into each eye four times daily	purchased over the counter (>6years of age)
Olopatadine	1mg/ml eye drops	Child 3-17 years 1 drop into each eye twice daily	Max. duration of treatment 4 months *Consultants advise greater than 4 months may be needed dependant on length of season*

Failed MMT is defined as persistent moderate to severe symptoms using ARIA (Allergic Rhinitis and its Impact on Asthma) guidelines. ARIA guidelines were developed in the US and are used worldwide. They are accepted by the British Society of Allergy and Clinical Immunology (BSACI) as the most up to date and evidence-based guidelines on managing Allergic rhinitis in adults and children see the following link for further information. (BSACI guideline for the diagnosis and management of allergic and non allergic rhinitis (Revised Edition 2017; First edition 2007)

Patient Referral Process:

Once patients have completed a full season on Maximal Medical Therapy as noted above, they can be directly referred to the Paediatric Allergy Clinic. There is no need to undertake Blood/ Specific

IgE (previously known as RAST) tests before referral as long as the history and symptoms are compatible with allergic rhinitis. Skin prick testing and bloods if needed will be done in clinic.

The following tick box can be used for ensuring referrals are appropriate:

-Age over 5 years (Grass)/ over 12 years (HDM) ☐

-Documented allergic rhinitis symptoms ☐

Treatment (for one season)

-Nasal steroid spray (max dose) ☐

-Maximum off-license daily dose antihistamines ☐

-Montelukast (Daily) ☐

-Eye drops **if** eye symptoms significant ☐

-Ongoing symptoms despite above treatment ☐

How does the programme work

Once the child has been identified and wishes to proceed, patient information is to be given to the family and consent taken. The patient will be prescribed the SLIT as an outpatient and an appointment will be made to see the patient on Sunflower day-case for the first dose of medication to be administered under supervision in hospital.

Once the patient has been started on SLIT, they will receive prescriptions from the hospital for ongoing treatment and be reviewed in clinic regularly (expected to be on a 3 monthly basis). It is expected that the patients will receive treatment for a total of 3 years to obtain full benefit, although this will be reviewed in each patient on a yearly basis to assess response to treatment and the benefit of continuing. Patients will complete annual Quality of life questionnaires to enable objective assessment also.

It is expected that patients will have a significant reduction in symptoms of allergic rhinitis after the first year of treatment and that their regular medication requirements will be reduced each year. SLIT does not cure the patient of their condition and there may still be some ongoing symptoms, but these are hoped to be much more manageable and have significantly less impact on daily life.

What are the possible side effects?

SLIT commonly causes local irritation, oral Itching and hay fever type symptoms. True anaphylaxis is rare.

How to contact?

If you have any questions please contact Dr Traves or Dr Starkey on (01332) 786441 or 786826

Produced by Derbyshire guideline group in consultation with Prof. O Judd consultant in ENT, Head & Neck Surgeon UHDB and Dr. D Traves paediatric consultant UHDB