

How to write an allergen immunotherapy prescription?

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SCIT or SLIT?



SLIT!

- **SAFE**
- **CHILD FRIENDLY**
- **CONVENIENT**
- **Con: EXPENSIVE...**

Indications for SLIT

1. Indications in children
2. Asthma – rhinitis – eczema
3. Practical issues
4. Future → prevention!



Q: ... are we using SLIT wrongly?



- QUESTIONS -

SLIT in childhood allergies

- Are we doing the wrong studies?
(selection)
- Are we starting SLIT too late?
(age)
- Should we use its preventive abilities?
(in children at risk for asthma)

Current Indications for SLIT

- cfr. the different guidelines: ...“***when conventional treatment doesn’t work...***”
- start treatment: symptomatic
- immunotherapy: after symptomatic treatment

... nowadays (2012)

- **Control:** **YES** *(most can!)*
- **Cure:** **NO** *(except with immunotherapy?)*
- **Prevention:** **NO**
- **Approach:** **AVOID COMPLICATIONS**

Prognosis - into adulthood

- Asthma:	50% persist
- Eczema:	10 - 20% persist
- Rhinitis:	80% persist <i>(chronic rhino-sinusitis)</i>

... most studies were done on asthma, and little data on eczema and rhinitis

Childhood asthma

- role of respiratory viruses (rhino, RSV, etc)
- allergy comes in later
... and is usually not a trigger of acute attacks

The origins of asthma and chronic obstructive pulmonary disease in early life.

Martinez FD. Proc Am Thorac Soc, 2009, 6, 272 - 7

- It is now apparent that the pattern of bronchial hyperresponsiveness, deficits in lung function, and structural airway **remodeling** that are characteristic of asthma may be already **established during the preschool years in most patients.**
- Deficits in airway function present **shortly after birth** predict airflow limitation in early adult life, which in turn is a strong predisposing factor for COPD.
- Novel strategies for **primary prevention** of chronic respiratory diseases will be based on the identification of the genetic and environmental factors that interactively cause these disruptions.

Childhood asthma

Bronchial inflammation



... early in life

Bronchial remodeling



COPD

Effectiveness of SLIT in allergic diseases

SLIT-studies 2009 – 2012 (November)

- 27 new studies on SLIT in allergic children
- Good and not so good studies
- GP: 10 – HDM: 10 – others: 27
- 25 / 27 positive results
- 2 negative studies: both in polysensitized children with allergic rhinitis

SLIT in children

1. Effective (rhinitis > conjunctivitis > **asthma** > eczema)

2. Safe (at home...)

3. Additional effects

- **carry-over effect (4 - 5 years)**
- **prevention of new sensitizations**
- **prevention of asthma in rhinitis pts**



OLDER CHILDREN

Prognosis dependent of **complications**

- asthma: lung function disturbances (COPD)
- rhinitis: rhino-sinusitis (acute and chronic)
- eczema: skin infections - scarring

SLIT – current weaknesses

1. Company-sponsored research.
2. No standardization in extracts.
3. Expensive.
4. Insufficient data in young children

SLIT in childhood asthma

INDICATIONS (?)

1. Prevention of allergic asthma (eczema, others)
2. Start early in asthmatic youngsters



Research Agenda

SLIT in young children at risk to develop asthma



Long term follow-up

- **Conclusions** -

SLIT in childhood asthma - allergy

Questions:

- Are we doing the wrong studies? **YES**
- Are we starting SLIT too late? **YES**
- Should we use its preventive abilities? **YES**