



All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search PubMed for Go Clear [Advanced Search](#)

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#) [Details](#)

Display AbstractPlus Show 20 Sort By Send to

All: 1 Review: 0

1: [J Investig Allergol Clin Immunol.](#) 2005; 15(1):9-16.

[Links](#)

Efficacy of sublingual allergen vaccination for respiratory allergy in children. Conclusions from one meta-analysis.

[Olaguíbel JM](#), [Alvarez Puebla MJ](#).

Sección de Alergología, Hospital Virgen del Camino, Pamplona, Spain.
jmolaguibel@telefonica.net

BACKGROUND: Sublingual route, that allows the safe administration of allergen vaccination at home and without injections, is a highly attractive alternative to parenteral delivery, especially among the youngest population. However, its efficacy in children has been questioned. **OBJECTIVE:** To evaluate the efficacy (symptom and medication scores) of sublingual allergen vaccination compared to placebo in paediatric patients. **SEARCH STRATEGY:** MEDLINE, EMBASE, ISI and the Cochrane Central Register of Controlled Trials were explored (completed in January/04) for potentially relevant studies. **SELECTION CRITERIA:** Randomized double-blind placebo-controlled clinical trials involving children < or = 14 years-old with either rhinitis or asthma of proved allergic aetiology. Data collection and analysis. Two reviewers analyzed independently the eligibility of studies for inclusion. The combined standardized mean difference (SMD) method was used to evaluate differences. Since heterogeneity was expected, probably due to the different procedures from each trial, we used the random effect model to obtain SMD. However, we also present the SMD values from the fixed effect model. The main outcomes were clinical symptom (asthma, rhinitis and conjunctivitis) and drug requirement scores. Safety, immunological and clinical changes were also reviewed. **RESULTS:** Seven double-blind placebo-controlled trials, enrolling 256 children (129 treatment and 127 placebo recipients), were analyzed. We observed decreases in symptom (SMD: -1.42 for asthma, -0.44 for rhinitis and -1.49 for conjunctivitis) and medication requirement (SMD: -1.01) scores. Only reductions in asthma (p=0.01) and drug dosage (p=0.06) scores reached statistical significance with the random effect model but changes in rhinitis symptoms (p=0.27) or conjunctival symptoms (p=0.19) were not statistically significant. Results obtained with the fixed effect model were similar in magnitude (SMD: -1.60 for asthma, SMD: -0.47 for rhinitis, SMD: -1.09 for conjunctivitis and, SMD: -0.54 for drug intake). Safety was a constant in all the studies; neither severe nor systemic reactions were observed and, oral and gastrointestinal complains were the most common adverse effects. **CONCLUSION:** In children, sublingual delivery of allergen vaccination constitutes a safe and effective alternative to the sublingual route to reduce allergy respiratory symptoms and drug intake. Further studies in this group of age are required to establish the optimal conditions for sublingual allergen vaccination.

PMID: 15864877 [PubMed - indexed for MEDLINE]

Display AbstractPlus Show 20 Sort By Send to

Related articles

- ▶ **Review** Sublingual immunotherapy for allergic rhinitis. [Cochrane Database Syst Rev. 2003]
 - ▶ **Review** Sublingual immunotherapy for allergic rhinitis: systematic review and meta-analysis. [Allergy. 2005]
 - ▶ **Review** Allergen injection immunotherapy for seasonal allergic rhinitis. [Cochrane Database Syst Rev. 2007]
 - ▶ Efficacy of sublingual immunotherapy in the treatment of allergic rhinitis in pe[Ann Allergy Asthma Immunol. 2006]
 - ▶ [Allergen-specific immune therapy in the treatment of asthma] [Ugeskr Laeger. 2000]
- » See reviews... | » See all...

Recent Activity

[Turn Off](#) [Clear](#)

- Efficacy of sublingual immunotherapy in the treatment of allergic rhinitis in pediatric pa...
- Efficacy of sublingual allergen vaccination for respiratory allergy in children. Conclusio...
- Sublingual immunotherapy: efficacy-- methodology and outcome of clinical trials.
- Sublingual immunotherapy for allergic rhinitis: systematic review and meta-analysis.
- Sublingual immunotherapy in children.

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)