



MEETING ABSTRACT

Open Access

Systematic review of outcome measures in randomised controlled trials of pediatric eosinophilic esophagitis (EoE) treatment

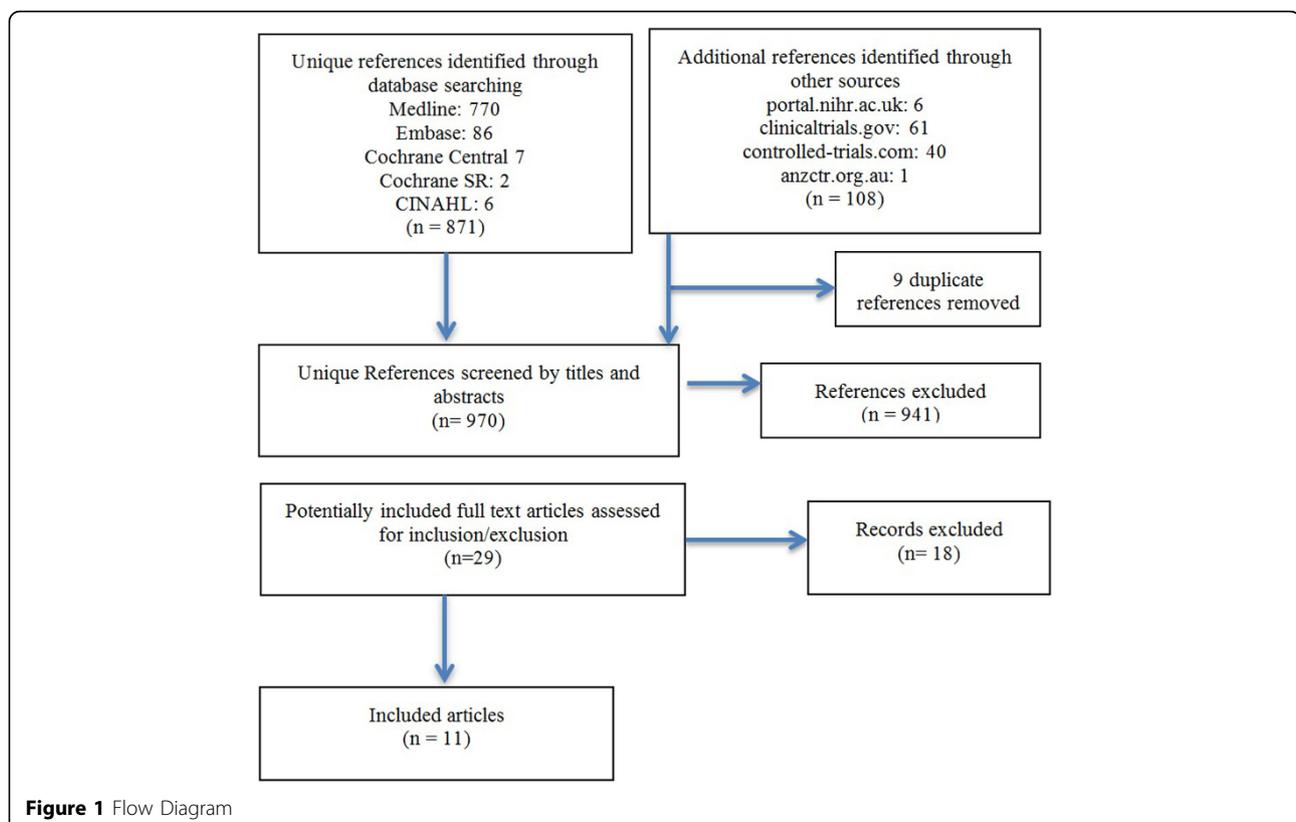
Tamar Rubin¹, Jacqueline Clayton¹, Denise Adams^{1,2}, Rabin Persad^{1,4}, Sunita Vohra^{1,2,3*}

From Canadian Society of Allergy and Clinical Immunology Annual Scientific Meeting 2013
Toronto, Canada. 3-6 October 2013

Background

Heterogeneity has been noted in the selection and reporting of disease-specific pediatric outcomes in randomized controlled trials (RCTs) [1]. The consequence may be

invalid results from RCTs, or difficulty in comparing results across trials [2,3]. The primary objective of this systematic review was to assess the heterogeneity of outcome measures selection and reporting in recent



* Correspondence: svohra@ualberta.ca

¹Department of Pediatrics, University of Alberta, Edmonton, Alberta, Canada
Full list of author information is available at the end of the article

pediatric EoE treatment trials. As secondary objectives, we assessed the heterogeneity of disease definition and resolution across studies compared to established consensus guidelines, as well as the evidence for current EoE treatments.

Methods

We searched MEDLINE, EMBASE, The Cochrane Library, Cochrane Central Register of Controlled Trials (CENTRAL), and CINAHL from the last ten years, including randomized controlled trials of EoE treatment in patients 0-18 years. Two authors independently assessed articles for inclusion.

Results

A total of 11 studies met inclusion criteria (Fig 1). Numerous outcome measures were selected and reported in these trials, with certain measures, such as esophageal eosinophilia, clinical symptoms, safety, histologic features, and endoscopic features, re-occurring frequently, but not universally. Uptake of consensus-established diagnostic criteria for EoE (FIGER criteria) was 30% in trials published after 2007. Due to the small number and heterogeneity of studies obtained, no conclusions regarding treatment efficacy could be made.

Conclusions

The results of this study confirm the need for universally reported, pediatric-specific, standardized outcome measures in EoE trials. Adherence to standardized disease definitions will enhance the utility of outcome measures. Consistent disease definition and standardized outcome reporting will allow for meta-analyses across similar trials and thus inform future clinical decision-making in pediatric EoE.

Systematic review registration

CRD42013003798

Authors' details

¹Department of Pediatrics, University of Alberta, Edmonton, Alberta, Canada.

²CARE Program, University of Alberta, Edmonton, Alberta, Canada.

³Department of Public Health Sciences, University of Alberta, Edmonton, Alberta, Canada. ⁴Department of Pediatric Gastroenterology, University of Alberta, Edmonton, Alberta, Canada.

Published: 3 March 2014

References

1. Clarke M: Standardising outcomes for clinical trials and systematic reviews. *Trials* 2007, **8**:39.
2. Sinha I, Jones L, Smith RL, Williamson PR: A systematic review of studies that aim to determine which outcomes to measure in clinical trials in children. *PLoS Med* 2008, **5**(4):e96.
3. Williamson PR, Gamble C, Altman DG, Hutton JL PR: Outcome selection bias in meta-analysis. *Stat Methods Med Res* 2005, **14**:515-524.

doi:10.1186/1710-1492-10-S1-A70

Cite this article as: Rubin *et al*: Systematic review of outcome measures in randomised controlled trials of pediatric eosinophilic esophagitis (EoE) treatment. *Allergy, Asthma & Clinical Immunology* 2014 **10**(Suppl 1):A70.

Submit your next manuscript to BioMed Central
and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit

