**Table 1 - Characteristics of included Randomized Controlled Trials**

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| **Title**  | **Author/ Year** |  **Study Design** | **Age/ Sample Size** | **Drug/ Dose/ Duration of Treatment** | **Outcome** | **Results** |
| Comparison of oral Prednisone and topical Fluticasone in the treatment of Eosinophilic Esophagitis: A randomized trial in children | Schaefer et al. 2008 | Prospective open-label randomized trial | 1-18 yearsN= 80 | Fluticasone aerosol 880μg/d 1-10 years, 1760μg/d >11 years (n=40) / Methylprednisolone oral suspension /tablet 2mg/kg/dose/d (n=40) 4 weeks. (Dose divided twice daily)  | Primary outcome: Histological response: Improvement in biopsy grade (included basal cell zone thickness as a percentage of the epithelial thickness and the maximum number of eosinophil/ HPF). Points were summed and total were translated into histologic grades (normal, mild, moderate and severe)Secondary outcomes: Clinical response : Presence or absence of presenting symptoms.  | 1) Histological remission was reported in 81 % of patients in Prednisolone group and 50 % in Fluticasone group; p value= 0.0440.2) Clinical remission was reported in100 % of patients in Prednisolone and 97.2 % in the Fluticasone group. p value=0.7399 3) Endoscopic parameters response was not reported.4) Adverse effects: Hyperphagia, weight gain, and/or cushingoid features were reported in 40% Prednisolone group vs. none in Fluticasone group |
| Oral viscous Budesonide is effective in children with Eosinophilic Esophagitis in a randomized, placebo-controlled trial  | Dohil et al. 2010 | Randomized double-blind placebo-controlled trial | 1-17 yearsN= 24 | Budesonide oral viscous for 3 months (the daily dose was divided in two doses) 1 mg/ d <5-feet tall,2 mg/d ≥ 5-feet tall (n=15) /placebo(n=9)   | Primary outcome: Improvement in esophageal eosinophilia (0-6 eosinophil counts /HPF); partial responders (7-19 eosinophil/HPF).Secondary outcomes: A detailed scoring system was formulated to assess Symptomatic (symptom scoring tool devised for children with acid peptic disorders based on absence or presence of mild and severe upper GI symptoms) and Endoscopic (scoring tool based on absence or presence of mucosal pallor, linear furrows, white plaque, concentric rings and friability) response. | 1) Histological remission was reported in 86.7 % of patients in the study group and in 0 % of patients in the control group; p value < 0.0001.2) Clinical response: The mean symptom score improved from 3.5 at base line to 1.2 after treatment in the study group (p=0. 0007). The mean symptom score was 2.7 before and 1.8 after treatment in placebo group (p= 0.22) 3) Endoscopic response: The mean endoscopy score improved from 4.6 before to 1.5 after treatment in study group (p= 0.0005). The mean endoscopy score improved from 7.8 before to 5.4 after treatment in placebo group (p=0 .041)4) Adverse events: One patient developed oral candida, which responded to Nystatin.  |
| Reslizumab in children and adolescents with eosinophilic esophagitis: Results of a double-blind, randomized, placebo-controlled trial. |  Spergel et al. 2012 | Randomized multicenter double-blind placebo-controlled trial | 5-18 yearsN= 227 | Intravenous infusion of 1,2 or 3mg/kg Reslizumab or placebo. Study medication was administered every 28 (+/- 7) days for a total of 4 doses. | Primary outcome: Percentage change in the peak eosinophil count.Secondary outcome: Physicians EoE global assessment score (included physical findings, vital signs, predominant EoE symptoms, patient’s symptom diary and dietary questions). It was categorized as none, mild, moderate, severe or very severe. Other efficacy measure included the patient’s EoE predominant symptom assessment and the Children’s Health Questionnaire. | 1) Histological response: The percentage improvement from baseline in peak eosinophil count was greater in 3-study group than in placebo group; p value < 0.001.2) Clinical response: No significant difference between study and placebo group in Physicians EoE global assessment score. 3) Endoscopic parameters were not reported.4) Adverse events: Infusion-site reactions (tenderness, erythema and some degree of swelling) were reported in 0 % of 1mg/ kg study group, 3.5% in 2mg/kg study group, 7.0% in 3mg/kg study group and 7 % patients in the control group. |
| Efficacy and safety of oral Budesonide suspension in pediatric patients with Eosinophilic Esophagitis  | Gupta et al. 2015 | Randomized multicenter double-blind placebo-controlled trial  | 2-18 years.N= 81 | Budesonide viscous liquid dose divided twice daily for 12 weeks –Low dose (n=21): 0.35 mg/d 2-9 years & 0.5 mg/d 10-18 years.Medium dose (n=19): 1.4 mg/d 2-9years & 2 mg/d 10-18years. High Dose (n=20): 2.8 mg/d 2-9years  & 4mg/d 10-18years.Placebo (n=21)  | Primary outcome: Compound histologic + symptom response: Both peak eosinophil count of </= 6/HPF in all esophageal levels and >/= 50% reduction from baseline in the EoE Clinical symptomatic score (CSS).Histological remission: Peak eosinophil count of </=1/HPF in all esophageal levels.Symptom resolution: EoE CSS of 0. | 1) Histological remission was reported in 11.8% (p = 0.4597 ), 42.1% (p=0.0042)and 76.5% (p < 0.0001) in low, medium and high dose group respectively compared to 0% in control group2) Clinical remission was reported in 17.6 % (p=0.3444), 31.6% (p=0.9258) and 17.6% (p=0.325) in low, medium and high dose study group respectively compared to 33.3% in control group.3) Compound Histologic + Symptom response: 52.6% (p value= 0.0092) subjects in medium dose group and 47.1 % (p value=0.0174) in high dose study group demonstrated primary compound response compared to 5.6% in placebo group. No significant difference between low dose 11.8% (p value=0.5282) and placebo group.4) Endoscopic parameters were not reported.5) Adverse events: 3.3% percent subjects in study group experienced oropharyngeal or esophageal candidiasis.  |
| A randomized, double-blind, placebo-controlled trial of Fluticasone Propionate for pediatric Eosinophilic Esophagitis | Konikoff et al. 2006 | Randomized double-blind placebo-controlled trial | 3- 19 yearsN= 36 | Fluticasone propionate 880 μg/d (n=21) / placebo n=15) for 3 months (dose divided twice daily) | Primary outcome: Complete histological remission: Peak eosinophil count of < / = 1 eosinophil in all 400x HPF in both proximal and distal esophagus.Secondary outcomes: Improvement in presence of endoscopic furrow, epithelial hyperplasia and clinical symptoms | 1) Histological remission was reported in 50% patients in study compared to 9 % in the control group; p value= 0.0472) Clinical remission: Resolution of vomiting was reported in 67% of patients in study group and 27% of patient in the control group; p value=0.04 (3) Endoscopic response: Fewer individuals in Fluticasone group had endoscopic distal furrowing compared with placebo group (50% vs 91%); p value = 0.047. Distal furrowing was not present in any Fluticasone responders after treatment while all Fluticasone non responders had persistent furrowing in distal esophagus, p value= 0.0001. Reduction in epithelial hyperplasia in Fluticasone responders (proximal esophagus, p value = 0. 002; distal esophagus, p value = 0.001). Treatment with placebo had no effect. Fluticasone non responders had no change in epithelial hyperplasia.4) Adverse events: One patient in study group developed esophageal candidiasis, which resolved after 10 days of oral Nystatin therapy.  |