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Original Articles

Primary Eosinophilic Esophagitis in Children: Successful Treatment with Oral Corticosteroids

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Abstract

Background: The histologic appearance of esophageal eosinophils has been correlated with esophagitis and gastroesophageal reflux disease in children. Esophageal eosinophilia that persists despite traditional antireflux therapy may not represent treatment failure, but instead may portray early eosinophilic gastroenteritis or allergic esophagitis. In this study, a series of pediatric patients with severe esophageal eosinophilia who were unresponsive to aggressive antireflux therapy were examined and their clinical and histologic response to oral corticosteroid therapy assessed.

Methods: Of 1809 patients evaluated prospectively over 2.5 years for symptoms of gastroesophageal reflux, 20 had persistent symptoms and esophageal eosinophilia, despite aggressive therapy with omeprazole and cisapride. These patients were treated with 1.5 mg/kg oral methylprednisolone per day, divided into twice-daily doses for 4 weeks. All patients underwent clinical, laboratory, and histologic evaluation before and after treatment.

Results: Histologic findings in examination of specimens obtained in pretreatment esophageal biopsies in children with primary eosinophilic esophagitis indicated significantly greater eosinophilia (34.2 ± 9.6 eosinophils/high-power field [HPF]) compared with that in children with gastroesophageal reflux disease who responded to medical therapy (2.26± 1.16 eosinophils/HPF; $p < 0.001$). After corticosteroid therapy, all but one patient with primary eosinophilic esophagitis had dramatic clinical improvement, supported by histologic examination (1.5± 0.9 eosinophils/HPF, $p < 0.0001$).

Conclusions: Pediatric patients in a series with marked esophageal eosinophilia and chronic symptoms of gastroesophageal reflux disease unresponsive to aggressive medical antire-flux therapy had both clinical and histologic improvement after oral corticosteroid therapy.

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In 1982, Winter et al. correlated the histologic appearance of esophageal eosinophils with abnormal acid clearance [1]. Since then, the presence of esophageal eosinophils without evidence of other gastrointestinal disorder has been the hallmark of gastroesophageal reflux and esophagitis in children. Although Winter et al. suggested that the number of esophageal eosinophils increases in proportion to the amount of acid emitted in the distal esophagus, in most cases of reflux esophagitis, only a small number of esophageal eosinophils are present (counted per high-power microscopic field [HPF]).

In the past, patients with chronic symptoms of gastroesophageal reflux(GER) and esophageal eosinophilia that persisted despite antireflux procedure[2,3]. Recently, several reports in the adult literature have described patients with idiopathic eosinophilic esophagitis with persistent dysphagia, esophageal spasm, or esophageal stricture, with the eosinophilic esophagitis responding to steroids[4-6]. Kelly et al. have reported a series of 10 children with symptoms of GER and eosinophilic esophagitis who improved with the introduction of an amino acid-based formula [7].

We report a series of 20 children with symptoms of GER and primary eosinophilic esophagitis that were unresponsive to aggressive antireflux medical therapy but that responded both clinically and histologically to oral corticosteroids.

MATERIALS AND METHODS

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Patients

Between January 1, 1993, and July 1, 1995, 1809 patients were evaluated for GER disease. Each patient displayed chronic gastrointestinal symptoms (>2 months' duration) including abdominal-epigastric pain or regurgitation-vomiting, and at least one of the following: nausea, globus, water brash, chest pain, dysphagia, nighttime coughing, choking, poor appetite, weight loss, or irritability. Upper gastrointestinal series were performed in all patients. Whenever symptoms persisted or recurred despite medical management (positioning, feeding alteration, antacids, or H_2 blockers) or when the symptoms were complicated by gastrointestinal bleeding, respiratory disease, or weight loss, an esophagogastroduodenoscopy (EGD) was performed by a board-certified pediatric gastroenterologist using an Olympus video endoscope (Olympus, Columbia, MD, U.S.A.) (N30, XP20, or GIF 100-depending on the patient's age). Patients with known gastrointestinal disorders (Crohn's disease, ulcerative colitis, celiac disease), anatomic abnormalities (malrotation, hiatal hernia, duplication) or systemic disease(cancer, chronic renal disease, scleroderma) were excluded.

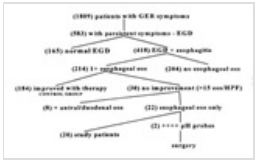

Fig. 1

Pathologic Evaluation

At least two random grasp biopsies were taken of the duodenum (third portion), stomach (antrum), and esophagus (3-5 cm above Z-line) in every patient. Additional biopsies were taken from any other site that was visually abnormal. The average number of biopsy specimens taken from each site was 2.3± 1.1. Each specimen was evaluated for inflammatory infiltrate(neutrophils, eosinophils) and ulceration. In addition, duodenal specimens were evaluated for villous and crypt abnormalities, antral specimens for the presence of *Helicobacter pylori*, and esophageal specimens for reflux esophagitis [8,9]. In every esophageal specimen, the number of eosinophils per HPF (magnification, ×40) was determined by averaging the number of eosinophils in sequential HPFs over the entire area(one level) of the specimen.

Study Population

All study patients underwent 24-hour pH probe testing (to determine whether acid reflux was related to esophageal eosinophilia) and laboratory evaluation, including complete blood count with differential, total serum eosinophil count, quantitative immunoglobulin (Ig) E level, chemistry panel, and sedimentation rate. Patients with severe reflux revealed by pH probe (reflux index >40%) underwent surgical evaluation for fundoplication. The remaining patients began a 4-week course of oral methylprednisolone. Before therapy, each patient and family member was interviewed and completed a questionnaire regarding the type, chronicity, and frequency of symptoms (including emesis, regurgitation, heartburn, globus, dysphagia, irritability, weight loss, anorexia, water brash). Factors that precipitated symptoms-foods, position, and exercise-were also recorded. Each week, a telephone interview was conducted by the physician to record any change in clinical symptoms. All acid-suppressing medication and prokinetic agents were continued. After 4 weeks of therapy, a second upper endoscopic study, complete blood count, total serum eosinophil count, and quantitative IgE were performed.

Five hundred eighty-three patients underwent EGD for GER. Of this group, reflux esophagitis was diagnosed and treated in 418. Initial treatment consisted of ranitidine with metoclopramide or cisapride. Those patients who improved during the therapy were considered to be the reference group of children with GER. If the patients' symptoms worsened or did not show at least a 50% improvement with medication, the dose of ranitidine was increased to a maximum of 3 mg/kg twice daily, and patients were given cisapride at a maximum dose of 0.3 mg/kg four times daily. After 3 months, another EGD was performed if symptoms remained despite the therapy. Patients with continued histologic evidence of esophagitis continued receiving cisapride but with the addition of omeprazole (1 mg/kg per day; minimum, 10 mg/day; maximum, 20 mg twice daily).

Patients who remained symptomatic despite more than 3 months of omeprazole and cisapride therapy again underwent EGD (11.2 ± 3.8 months after the initial EGD). Those in whom continued severe esophageal eosinophilia was demonstrated, consisting of more than 15 eosinophils/HPF without evidence of antral or duodenal eosinophilia were defined as the study population. In patients with antral or duodenal eosinophilia, in addition to esophageal eosinophilia, eosinophilic gastroenteritis was diagnosed, and the patients were excluded from the study. Figure 1 outlines selection of the study population.

Comparison of esophageal eosinophilia, total eosinophil count, and quantitative IgE was performed by the Wilcoxon matched-pairs signed ranks test(SPSS for Windows, Chicago, IL, U.S.A.).

RESULTS

An EGD was performed in 583 patients: Findings were normal in 165, whereas 418 had histologic evidence of esophagitis. Of these, 214 had at least 1 esophageal eosinophil/HPF without evidence of gastric or duodenal disease(Figure 1). After treatment with ranitidine-omeprazole and metoclopramide-cisapride, clinical symptoms improved in 184 patients (control group). The clinical characteristics of the control group consisted of 94% with regurgitation-vomiting, 82% with abdominal-epigastric pain, 69% with nausea, 53% with chest pain-heartburn, 22% with weight loss, 17% with water brash-globus, 16% with choking, 13% with dysphagia, and 8% with bronchospasm, coughing, and eczema.

Findings in a second EGD examination showed 30 patients with continued esophageal eosinophilia (>15 eosinophils/HPF) and persistent symptoms. In 8 patients with antral or duodenal eosinophilia (in addition to their continued esophageal eosinophilia) eosinophilic gastroenteritis was diagnosed and the patients excluded from the study. The remaining 22 patients underwent a 24-hour pH probe (Synectios pH probe, Irving, TX, U.S.A.), with all acid-suppressing agents and prokinetic medications withdrawn. Two patients had severe GER according to pH probe criteria (reflux index >40%; total time and longest episodes >90 minutes) and underwent an antireflux procedure. Twenty patients demonstrated mild or no reflux in examination by pH probe but continued to have severe symptoms and eosinophilic esophagitis, despite medical therapy with omeprazole and cisapride (Table 1).Table 2 depicts the 24-hour pH probe characteristics of the study population. The average duration of symptoms in these patients was 3.2 ± 1.8 years. Results of laboratory testing revealed 1 patient with an elevated sedimentation rate and 1 with hypoalbuminemia.


Table 1


Table 2

The average number of esophageal eosinophils/HPF was significantly greater in those children with eosinophilic gastroenteritis and primary eosinophilic esophagitis (34.7 ± 17.3 eosinophils/HPF and 34.2 ± 9.6 eosinophils/HPF, respectively), compared with the count in children with GER that responded to antireflux therapy (2.26 ± 1.16 eosinophils/HPF;$p < 0.001$); however, no statistical difference was found in the average number of esophageal eosinophils/HPF between children with primary eosinophilic esophagitis and those with eosinophilic gastroenteritis.

Results of Corticosteroid Therapy

Twenty patients entered the study and began a 4-week course of 1.5 mg/kg methylprednisolone twice daily. Thirteen of 20 patients became completely asymptomatic and 6 others had marked improvement in their clinical symptoms after 4 weeks of corticosteroid therapy. The average time for initial appearance of clinical improvement was 8 ± 4 days. One patient continued to experience abdominal pain similar to the pain described before the initiation of steroid therapy. All 20 patients demonstrated significant clinical (asymptomatic) improvement, which was supported by histologic evidence of the average number of esophageal eosinophils/HPF. In addition, a significant difference was seen in the serum eosinophil count and quantitative IgE level (Table 3). Figure 2 shows the esophageal histologic improvement after corticosteroids.


Table 3


Fig. 2

LONG-TERM FOLLOW UP

After a second EGD, each patient's corticosteroids and reflux medications were tapered and withdrawn in 6 weeks. At the 12-month follow up, 10 patients(50%) remained asymptomatic. In 9, symptoms redeveloped and dietary restrictions were imposed, as previously described [(7)]. Of these patients, 7 (35%) responded to dietary withdrawal, whereas 2 (10%) remained symptomatic and required a second corticosteroid challenge, 6± 2.5 months after initial steroid therapy. One patient (5%) remained symptomatic despite corticosteroids and dietary restriction.

DISCUSSION

These results demonstrate that a significant number of children with characteristic symptoms of gastroesophageal reflux and predominant eosinophilic esophagitis do not have GER but instead have a unique disorder, which does not respond to antireflux therapy but does respond both clinically and histologically to oral corticosteroids. The features of this disorder, observed in the patients reported here, are significant eosinophilic infiltration only of the esophagus; minimal-to-no acid reflux detectable by 24-hour pH monitoring; and resolution of the esophageal eosinophilia, evident in histologic study, within 1 month of initiation of steroid therapy. Although not statistically significant, the clinical features of dysphagia, eczema, and

The precise role of the esophageal eosinophil has not been defined. Esophageal eosinophilia was linked to pediatric reflux esophagitis in 1982 by Winter et al. [(1)] They correlated the observation of esophageal eosinophils with abnormal esophageal acid clearance. However, none of the 46 patients studied had more than 3 eosinophils per HPF. Since that time, in several reports adult patients with severe eosinophilic esophagitis have been identified, suggesting a cause other than acid reflux detectable by 24-hour pH monitoring; and resolution of reflux. In 1985, Lee reported on a series of 11 patients with more than 110 esophageal eosinophils per HPF who had dysphagia, heartburn, vomiting, and esophageal strictures (in 3 of 11) [(10)]. Although he suggested that reflux occurred in the majority, reflux was not indicated

bronchospasm occurred more often in the study group, compared with occurrences of those symptoms in the control group with reflux esophagitis. After administration of corticosteroids, rapid improvement in clinical symptoms was observed in 19 of the 20 patients (noted within as few as 4 days); histologic evidence of improvement was documented within 4 weeks of therapy.

Although all of our study patients responded rapidly to corticosteroids and 50% remained asymptomatic 12 months after therapy, allergic enteritis should always be considered in these patients. A food elimination and challenge test should be conducted when parents or physicians choose not to use corticosteroids or when symptoms recur. Kelly et al. reported on a series of children with esophageal eosinophilia who did not respond to antireflux therapy but did respond to an amino acid-based formula [7]. Only 1 patient underwent a 24-hour pH probe, in which the results showed no evidence of reflux. The patients were given solely an an amino-acid based formula for a median of 17 weeks. Symptomatic improvement was seen within an average of 3 weeks; subsequently, regular foods were slowly reintroduced. Kelly et al. suggested an immunologic basis secondary to delayed hypersensitivity or to a cell-mediated hypersensitivity response.

Although the findings in this study do not answer the question of cause, they indicate that children with presumed severe reflux esophagitis that is unresponsive to aggressive antireflux medical therapy should not be immediately referred for antireflux surgery but instead should be evaluated for other immunologic and allergic causes of the esophageal eosinophilia. This study would have benefitted from inclusion of a placebo-controlled trial; however, the ethical considerations of using a placebo in children with severe clinical and histologic symptoms far outweighed the desirability of such a trial. Future research should be performed to determine the correlation of the number of esophageal eosinophils to specific disease (neonatal gastroesophageal reflux, recurrent reflux in infants and older children, allergic esophagitis and immunologic-based disease). In addition, research should be performed to determine the role of the enteric eosinophil and the cause of primary eosinophilic esophagitis.

by results of 24-hour pH probe. One patient was given steroids and showed clinical improvement.

In 1993, Attwood et al. described 12 patients with dysphagia who had more than 20 esophageal eosinophils/HPF (mean, 56/HPF) [11]. Normal findings in pH monitoring were noted in 92%, whereas 56% had evidence of an allergic disorder. He compared results in this group with those in patients with medically responsive GER (documented by 24-hour pH probe) of whom only 45% had eosinophils in the esophagus and to a much lesser degree(mean, 3.3 eosinophils/HPF). Vitellas et al. reported 13 male patients with primary esophageal eosinophilia, dysphagia (n = 12), allergic manifestations (n = 10), peripheral eosinophilia (n = 12) and proximal esophageal strictures (n = 10)[12]. None had reflux observed in barium contrast study and 85% improved with steroid therapy. In one patient, results of a second barium contrast esophagram showing resolution of the stricture.

Our results demonstrate that eosinophilic esophagitis may take months to years to evolve. One fourth of our patients did not demonstrate severe esophageal eosinophilia on initial endoscopic examination. In each of these patients, pronounced and persistent esophageal eosinophilia was found in a second EGD after failure to obtain a clinical response to antireflux medication. Similarly, whereas 70% of patients demonstrated peripheral eosinophilia, 35% did not until 5 months after initial evaluation. In 26%, patients with isolated esophageal eosinophilia had evidence of antral or duodenal eosinophilia in a second endoscopic study (eosinophilic gastroenteritis).

In several reports, it has been suggested that eosinophilic gastroenteritis can involve the esophagus [13-15]. Eosinophilic gastroenteritis is a poorly characterized, chronic disorder in which eosinophils infiltrate various layers of the alimentary tract, causing myriad gastrointestinal symptoms, including abdominal pain, vomiting, diarrhea, gastrointestinal bleeding, protein losing enteropathy, weight loss, and failure to thrive [16]. In the past, the diagnosis of eosinophilic enteritis was not made unless eosinophils were observed in another portion of the gastrointestinal tract. Eosinophilic tissue infiltration in eosinophilic gastroenteritis can occur in all layers and in every part of the gastrointestinal tract [17]. In children, findings of antral or duodenal eosinophilia, coupled with peripheral eosinophilia, suggest the diagnosis. Other gastrointestinal sites, including the esophagus and colon, have been reported to be affected in eosinophilic gastroenteritis but always in association with gastric or small bowel disease[14]. The majority of patients manifest peripheral eosinophilia; an elevated IgE level; and other allergic symptoms, including asthma, rhinitis, and eczema.

We believe that children in whom gastroesophageal reflux and esophagitis are diagnosed, who do not respond to aggressive antireflux therapy, should undergo another round of testing for primary eosinophilic esophagitis and for the development of eosinophilic gastroenteritis. If significant esophageal eosinophilia is noted on histologic study of a biopsy specimen, or if peripheral eosinophilia develops, primary eosinophilic esophagitis should be considered. Steroid therapy may offer advantages as the initial therapy; our results demonstrated rapid clinical and histologic improvement while the child consumed a diet of conventional foods.

REFERENCES

1. Winter HS, Madara JL, Stafford RJ. Intraepithelial eosinophils: A new diagnostic criterion for reflux esophagitis.*Gastroenterology* 1982;83:818-23.

2. Schatzlein MH, Ballantine TWN, Thirunavukkarasu S, et al. Gastroesophageal reflux in infants and children. *Arch Surg* 1979;114:505-10.

3. Hill LD, Aye RW, Ramel S. Antireflux surgery: A surgeon's look. *Gastroenterol Clin North Am* 1990;19:745-75.

4. Attwood SEA, Smyrk TC, DeMeester TR, et al. Esophageal eosinophilia with dysphagia: A clinico pathologic syndrome. *Dig Dis Sci* 1993;38:109-16.

5. Vitellas KM, Bennett WF, Bova JG, et al. Idiopathic eosinophilic esophagitis. *Radiology* 1993;186:789-93.

6. Levine MS, Saul SH. Idiopathic eosinophilic esophagitis: How common is it? *Radiology* 1993;186:631-2.

7. Kelly KJ, Lazenby AJ, Rowe PC, et al. Eosinophilic esophagitis attributed to gastroesophageal reflux: Improvement with an amino acid-based formula. *Gastroenterology* 1995;109:1503-12.

8. Behar J, Sheahan DC. Histologic abnormalities in reflux esophagitis. *Arch Pathol Lab Med* 1975;99:387-91.

9. Cucchiara S, D'Armiento F, Alfieri E, et al. Intraepithelial cells with irregular nuclear contours as a marker of esophagitis in children with gastroesophageal reflux disease. *Dig Dis Sci* 1995;40:2305-11.

10. Lee RG. Marked eosinophilia in esophageal mucosal biopsies. *Am J Surg Pathol* 1985;9:475-9.

11. Attwood SEA, Smyrk TC, Demeester TR, Jones JB. Esophageal eosinophilia with dysphagia: A distinct clinicopathologic syndrome.*Dig Dis Sci* 1993;38:109-16.

12. Vitellas KM, Bennett WF, Bova JG, et al. Idiopathic eosinophilic esophagitis. *Radiology* 1993;186:789-93.

13. Dobbins JW, Sheahan DG, Behar J. Eosinophilic gastroenteritis with esophageal involvement. *Gastroenterology* 1977;72:1312-16.

14. Matzinger MA, Daneman A. Esophageal involvement in eosinophilic gastroenteritis. *Pediatr Radiol* 1983;13:35-8.

15. Goldman H, Proujansky R. Allergic proctitis and gastroenteritis in children: Clinical and mucosal biopsy features in 53 cases.*Am J Surg Pathol* 1986;10:75-86.

16. Whitington PF, Whitington GL. Eosinophilic gastroenteropathy in childhood. *J Pediatr Gastroenterol Nutr* 1988;7:379-85.

17. Klein NC, Hargrove RL, Sleisinger MH, Jeffries GH. Eosinophilic gastroenteritis. *Medicine* 1970;49:299-319.

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Current Problems in Pediatric and Adolescent Health Care
Gastrointestinal Syndromes Associated with Food Allergies
Saltzman, RW; Brown-Whitehorn, TF
Current Problems in Pediatric and Adolescent Health Care, 42(7): 164-190.
10.1016/j.cppeds.2012.03.007
CrossRef

Gastroenterology Research and Practice
Eosinophilic Esophagitis in Children from Western Saudi Arabia: Relative Frequency, Clinical, Pathological, Endoscopic, and Immunological Study
Saadah, OI; Aburiziza, AJ; Abu Shakra, RI
Gastroenterology Research and Practice, (): -.
ARTN 328253

CrossRef

Nature Reviews Gastroenterology & Hepatology
Therapeutic concepts in adult and paediatric eosinophilic oesophagitis
Straumann, A; Schoepfer, AM
Nature Reviews Gastroenterology & Hepatology, 9(): 697-704.
10.1038/nrgastro.2012.182
CrossRef

American Journal of Physiology-Gastrointestinal and Liver Physiology
Tissue remodeling in eosinophilic esophagitis
Cheng, E; Souza, RF; Spechler, SJ
American Journal of Physiology-Gastrointestinal and Liver Physiology, 303(): G1175-G1187.
10.1152/ajpgi.00313.2012
CrossRef

Allergy
Anti-eosinophil activity and clinical efficacy of the CRTH2 antagonist OC000459 in eosinophilic esophagitis
Straumann, A; Hoesli, S; Bussmann, C; Stuck, M; Perkins, M; Collins, LP; Payton, M; Pettipher, R; Hunter, M; Steiner, J; Simon, HU
Allergy, 68(3): 375-385.
10.1111/all.12096
CrossRef

Allergy and Asthma Proceedings
Eosinophilic esophagitis: Review of nonsurgical treatment modalities
Reddy, V; Ghaffari, G
Allergy and Asthma Proceedings, 34(5): 421-426.
10.2500/aap.2013.34.3690
CrossRef

Jornal De Pediatria
Clinical manifestations, treatment, and outcomes of children and adolescents with eosinophilic esophagitis
Rodrigues, M; D'Amico, MFM; Patino, FRA; Barbieri, D; Damiao, AOMC; Sipahy, AM
Jornal De Pediatria, 89(2): 197-203.
10.1016/j.jped.2013.03.001
CrossRef

Immunology and Cell Biology
Pathogenesis of allergen-induced eosinophilic esophagitis is independent of interleukin (IL)-13
Niranjan, R; Rayapudi, M; Mishra, A; Dutt, P; Dynda, S; Mishra, A
Immunology and Cell Biology, 91(6): 408-415.
10.1038/icb.2013.21
CrossRef

Bmj Open
Eosinophils in the oesophageal mucosa: clinical, pathological and epidemiological relevance in children: a cohort study
Cohen, MC; Rao, P; Thomson, M; Al-Adnani, M
Bmj Open, 2(1): -.
ARTN e000493

CrossRef

Digestive Diseases and Sciences
Eosinophilic Esophagitis: Current Treatment
Redd, M; Schey, R
Digestive Diseases and Sciences, 58(3): 613-620.
10.1007/s10620-012-2383-1
CrossRef

Immunologic Research
Eosinophilic esophagitis: an immune-mediated esophageal disease
Weinbrand-Goichberg, J; Segal, I; Ovadia, A; Levine, A; Dalal, I
Immunologic Research, 56(): 249-260.
10.1007/s12026-013-8394-y

CrossRef

Hippokratia
Eosinophilic Esophagitis: update on treatment approaches
Fotis, L; Xatzipsalti, M; Papadopoulou, A
Hippokratia, 16(3): 200-204.

Journal of Allergy and Clinical Immunology
Idiopathic eosinophilic esophagitis is associated with a T(H)2-type allergic inflammatory response
Straumann, A; Bauer, M; Fischer, B; Blaser, K; Simon, HU
Journal of Allergy and Clinical Immunology, 108(6): 954-961.
10.1067/mai.2001.119917
CrossRef

Gastrointestinal Endoscopy
White specks in the esophageal mucosa: an endoscopic manifestation of non-reflux eosinophilic esophagitis in children
Lim, JR; Gupta, SK; Croffie, JM; Pfefferkorn, MD; Molleston, JP; Corkins, MR; Davis, MM; Faught, PP; Steiner, SJ; Fitzgerald, JF
Gastrointestinal Endoscopy, 59(7): 835-838.
PII S0016-5107(04)00364-5
CrossRef

Pediatric Gastroenterology 2004
Eosinophilic esophagitis: A paediatric experience
De Angelis, P; Torroni, F; Pane, A; Caldaro, T; di Abriola, GF; Boldrini, R; Dall'Oglio, L
Pediatric Gastroenterology 2004, (): 505-508.

Best Practice & Research in Clinical Gastroenterology
Idiopathic eosinophilic disorders of the gastrointestinal tract in children
Mukkada, VA; Furuta, GT
Best Practice & Research in Clinical Gastroenterology, 22(3): 497-509.
10.1016/j.bpg.2007.09.002
CrossRef

Nutrition in Clinical Practice
Medical and Nutrition Management of Eosinophilic Esophagitis in Children
Feuling, MB; Noel, RJ

Nutrition in Clinical Practice, 25(2): 166-174.

Archives of Pathology & Laboratory Medicine
Update on Esophagitis Controversial and Underdiagnosed Causes
Noffsinger, AE
Archives of Pathology & Laboratory Medicine, 133(7): 1087-1095.

Gastroenterology
Intratracheal IL-13 induces eosinophilic esophagitis by an IL-5, eotaxin-1, and STAT6-dependent mechanism
Mishra, A; Rothenberg, ME
Gastroenterology, 125(5): 1419-1427.
10.1053/S0016-5085(03)01352-0
CrossRef

Seminars in Diagnostic Pathology
Allergic eosinophilic esophagitis: a primer for pathologists
Antonioli, DA; Furuta, GT
Seminars in Diagnostic Pathology, 22(4): 266-272.
10.1053/j.semdp.2006.05.002
CrossRef

World Journal of Gastroenterology
Eosinophilic esophagitis: A newly established cause of dysphagia
Yan, BM; Shaffer, EA
World Journal of Gastroenterology, 12(): 2328-2334.

Gastrointestinal Endoscopy
Clinical presentation of patients with eosinophilic inflammation of the esophagus
Baxi, S; Gupta, SK; Swigonski, N; Fitzgerald, JF
Gastrointestinal Endoscopy, 64(4): 473-478.

10.1016/j.gie.2006.03.931
CrossRef

Pathology
Clinical and pathological features of eosinophilic oesophagitis: a review
Chang, F; Anderson, S
Pathology, 40(1): 3-8.
10.1080/00313020701716482
CrossRef

Best Practice & Research in Clinical Gastroenterology
General laboratory diagnostics of eosinophilic GI diseases
Conus, S; Simon, HU
Best Practice & Research in Clinical Gastroenterology, 22(3): 441-453.
10.1016/j.bpg.2007.09.003
CrossRef

Digestive Diseases and Sciences
Pheasant-induced dysphagia
Rodriguez-Stanley, S; Robinson, M; Biscopink, RJ; Miner, PB

Digestive Diseases and Sciences, 45(9): 1743-1746.

Gastrointestinal Endoscopy
EUS and histopathologic correlates in eosinophilic esophagitis
Stevoff, C; Rao, S; Parsons, W; Kahrilas, PJ; Hirano, I
Gastrointestinal Endoscopy, 54(3): 373-377.

Digestive Diseases and Sciences
Visceral sensitivity in gastroesophageal reflux
Theodoropoulos, DS; Pecoraro, DL; Lockey, RF; Boyce, HW; Bukantz, SC
Digestive Diseases and Sciences, 47(): 2554-2564.

Expert Opinion on Pharmacotherapy
Management of food allergies
Fogg, MI; Spergel, JM
Expert Opinion on Pharmacotherapy, 4(7): 1025-1037.

American Journal of Gastroenterology
Correlation between number of eosinophils and reflux index on same day esophageal biopsy and 24 hour esophageal pH monitoring
Steiner, SJ; Gupta, SK; Croffie, JM; Fitzgerald, JE
American Journal of Gastroenterology, 99(5): 801-805.
10.1111/j.1572-0241.2004.04170.x
CrossRef

Allergic Diseases and the Environment
The changing prevalence and clinical profile of food allergy in infancy
Hill, DJ; Heine, RG; Hosking, CS
Allergic Diseases and the Environment, 53(): 33-51.

Endoscopy
Analysis of symptoms and endoscopic findings in 117 patients with histological diagnoses of eosinophilic esophagitis
Muller, S; Puhl, S; Vieth, M; Stolte, M
Endoscopy, 39(4): 339-344.
10.1055/s-2007-966216
CrossRef

Immunology and Allergy Clinics of North America
Eosinophilic Esophagitis
Franciosi, JP; Liacouras, CA
Immunology and Allergy Clinics of North America, 29(1): 19-+.
10.1016/j.iac.2008.09.001
CrossRef

Nature Reviews Gastroenterology & Hepatology
Eosinophilic esophagitis: the newest esophageal inflammatory disease
Atkins, D; Kramer, R; Capocelli, K; Lovell, M; Furuta, GT
Nature Reviews Gastroenterology & Hepatology, 6(5): 267-278.
10.1038/nrgastro.2009.45

CrossRef

Gut
Anti-interleukin-5 antibody treatment (mepolizumab) in active eosinophilic oesophagitis: a randomised, placebo-controlled, double-blind trial
Straumann, A; Conus, S; Grzonka, P; Kita, H; Kephart, G; Bussmann, C; Beglinger, C; Smith, DA; Patel, J; Byrne, M; Simon, HU
Gut, 59(1): 21-30.
10.1136/gut.2009.178558
CrossRef

Digestive Diseases
Eosinophilic Esophagitis
Furuta, GT
Digestive Diseases, 27(): 122-128.
10.1159/000268132
CrossRef

Diseases of the Esophagus
Diagnosis of eosinophilic esophagitis after fundoplication for 'refractory reflux': implications for preoperative evaluation
Dellon, ES; Farrell, TM; Bozymski, EM; Shaheen, NJ
Diseases of the Esophagus, 23(3): 191-195.
10.1111/j.1442-2050.2009.01019.x
CrossRef

Gastrointestinal Endoscopy
The small-caliber esophagus: an unappreciated cause of dysphagia for solids in patients with eosinophilic esophagitis
Vasilopoulos, S; Murphy, P; Auerbach, A; Massey, BT; Shaker, R; Stewart, E; Komorowski, RA; Hogan, WJ
Gastrointestinal Endoscopy, 55(1): 99-106.
10.1067/mge.2002.118645
CrossRef

Allergy
The physiological and pathophysiological roles of eosinophils in the gastrointestinal tract
Straumann, A; Simon, HU
Allergy, 59(1): 15-25.

Pediatric and Developmental Pathology
Reflux esophagitis: Sequelae and differential diagnosis in infants and children including eosinophilic esophagitis
Dahms, BB
Pediatric and Developmental Pathology, 7(1): 5-16.
10.1007/s10024-003-0203-5
CrossRef

Cochrane Database of Systematic Reviews
Non-surgical interventions for eosinophilic esophagitis
Elliott, EJ; Thomas, D; Markowitz, JE
Cochrane Database of Systematic Reviews, (3): -.
ARTN CD004065

CrossRef

Pediatric Allergy and Immunology
Educational clinical case series in pediatric allergy and immunology
Khan, S; Kandula, L; Orenstein, SR
Pediatric Allergy and Immunology, 18(7): 629-639.
10.1111/j.1399-3038.2007.00659.x
CrossRef

Current Allergy & Clinical Immunology
Gastrointestinal syndromes in food allergy
Motala, C
Current Allergy & Clinical Immunology, 21(2): 76-81.

American Journal of Gastroenterology
Histopathologic Variability in Children With Eosinophilic Esophagitis
Shah, AA; Kagalwalla, AF; Gonsalves, N; Melin-Aldana, H; Li, BUK; Hirano, I
American Journal of Gastroenterology, 104(3): 716-721.
10.1038/ajg.2008.117
CrossRef

Digestive Diseases and Sciences
Eosinophilic Esophagitis
Moawad, FJ; Veerappan, GR; Wong, RK
Digestive Diseases and Sciences, 54(9): 1818-1828.
10.1007/s10620-009-0873-6
CrossRef

Pediatrics
Gastroesophageal reflux and cow milk allergy: Is there a link?
Salvatore, S; Vandenplas, Y
Pediatrics, 110(5): 972-984.

Diseases of the Esophagus
Primary eosinophilic esophagitis
Munitiz, V; de Haro, LFM; Ortiz, A; Pons, JA; Bermejo, J; Serrano, A; Molina, J; Parrilla, P
Diseases of the Esophagus, 16(2): 165-168.

Pediatric Gastroenterology 2004
Eosinophilic esophagitis: Increasing prevalence or best recognized?
de Carpi, JM; Varea, V; Gomez, M; Castejon, E; Masiques, MLI; Vilar, P
Pediatric Gastroenterology 2004, (): 431-435.

Medicina Clinica
Eosinophilic esophagitis
Lucendo, AJ
Medicina Clinica, 128(): 590-597.

American Journal of Gastroenterology
Oral viscous budesonide: A potential new therapy for eosinophilic esophagitis in children
Aceves, SS; Bastian, JF; Newbury, RO; Dohil, R
American Journal of Gastroenterology, 102(): 2271-2279.
10.1111/j.1572-0241.2007.01379.x
CrossRef

American Journal of Gastroenterology
Variability in diagnostic criteria for eosinophilic esophagitis: A systematic review
Dellon, ES; Aderoju, A; Woosley, JT; Sandler, RS; Shaheen, NJ
American Journal of Gastroenterology, 102(): 2300-2313.
10.1111/j.1572-0241.2007.01396.x
CrossRef

American Journal of Gastroenterology
"Congenital" esophageal stenosis, corrugated ringed esophagus, and eosinophilic esophagitis
Langdon, DE
American Journal of Gastroenterology, 95(8): 2123.

Immunological Reviews
Gastrointestinal eosinophils
Rothenberg, ME; Mishra, A; Brandt, EB; Hogan, SP
Immunological Reviews, 179(): 139-155.

American Journal of Gastroenterology
Ringed esophagus: Unclear relationship to gastroesophageal reflux disease
Bonis, PAL
American Journal of Gastroenterology, 96(): 3439.

Clinical Gastroenterology and Hepatology
Comparison of oral prednisone and topical fluticasone in the treatment of eosinophilic esophagitis: A randomized trial in children
Schaefer, ET; Fitzgerald, JF; Molleston, JP; Croffie, JM; Pfefferkorn, MD; Corkins, MR; Lim, JD; Steiner, SJ; Gupta, SK
Clinical Gastroenterology and Hepatology, 6(2): 165-173.
10.1016/j.cgh.2007.11.008
CrossRef

Expert Review of Clinical Immunology
The link between allergies and eosinophilic esophagitis: implications for management strategies
Brown-Whitehorn, TF; Spergel, JM
Expert Review of Clinical Immunology, 6(1): 101-109.
10.1586/ECI.09.74
CrossRef

American Journal of Gastroenterology
Elemental diet is an effective treatment for eosinophilic esophagitis in children and adolescents
Markowitz, JE; Spergel, JM; Ruchelli, E; Liacouras, CA
American Journal of Gastroenterology, 98(4): 777-782.
10.1016/S0002-9270(03)00054-6
CrossRef

Gastroenterology Clinics of North America
Eosinophilic esophagitis
Markowitz, JE; Liacouras, CA
Gastroenterology Clinics of North America, 32(3): 949-+.
10.1016/S0889-8553(03)00047-5
CrossRef

Alimentary Pharmacology & Therapeutics
Review article: epidemiology and management of gastro-oesophageal reflux in children
Gold, BD
Alimentary Pharmacology & Therapeutics, 19(): 22-27.

Clinical and Experimental Allergy
Eosinophil infiltration of the oesophageal mucosa in patients with pollen allergy during the season
Onbasi, K; Sin, AZ; Doganavsargil, B; Onder, GF; Bor, S; Sebik, F
Clinical and Experimental Allergy, 35(): 1423-1431.
10.1111/j.1365-2222.2005.02351.x
CrossRef

Journal of Allergy and Clinical Immunology
Eosinophilic esophagitis: Pathogenesis, genetics, and therapy
Blanchard, C; Wang, N; Rothenberg, ME
Journal of Allergy and Clinical Immunology, 118(5): 1054-1059.
10.1016/j.jaci.2006.07.038
CrossRef

Revista Espanola De Enfermedades Digestivas
Eosinophilic esophagitis - clinical manifestations, diagnosis, and treatment
Villarin, AJL
Revista Espanola De Enfermedades Digestivas, 101(1): 49-59.

Current Medical Research and Opinion
Patient and caregiver perspective on pediatric eosinophilic esophagitis and newly developed symptom questionnaires
Flood, EM; Beusterien, KM; Amonkar, MM; Jurgensen, CH; Dewit, OE; Kahl, LP; Matza, LS
Current Medical Research and Opinion, 24(): 3369-3381.
10.1185/03007990802536900
CrossRef

Gastrointestinal Endoscopy
Histopathologic variability and endoscopic correlates in adults with eosinophilic esophagitis
Gonsalves, N; Policarpio-Nicolas, M; Zhang, Q; Rao, MS; Hirano, I
Gastrointestinal Endoscopy, 64(3): 313-319.
10.1016/j.gie.2006.04.037
CrossRef

Annual Review of Nutrition

Food allergies: Prevalence, molecular characterization, and treatment/prevention strategies
Lee, LA; Burks, AW
Annual Review of Nutrition, 26(): 539-565.
10.1146/annurev.nutr.26.061505.111211
CrossRef

Best Practice & Research in Clinical Gastroenterology
Eosinophilic oesophagitis and other non-reflux inflammatory conditions of the oesophagus: Diagnostic imaging and management
Attwood, SEA; Lamb, CA
Best Practice & Research in Clinical Gastroenterology, 22(4): 639-660.
10.1016/j.bpg.2007.12.003
CrossRef

Gut
Primary eosinophilic disorders of the gastrointestinal tract
Yan, BM; Shaffer, EA
Gut, 58(5): 721-732.
10.1136/gut.2008.165894
CrossRef

Neurogastroenterology and Motility
Eosinophilic oesophagitis in adults
Gonsalves, N; Kahrilas, PJ
Neurogastroenterology and Motility, 21(): 1017-1026.
10.1111/j.1365-2982.2009.01307.x
CrossRef

Pathology
Oesophagitis in children: reflux or allergy?
Ireland-Jenkin, K; Wu, X; Heine, RG; Cameron, DJS; Catto-Smith, AG; Chow, CW
Pathology, 40(2): 188-195.
10.1080/00313020701813727
CrossRef

Gastroenterology Clinics of North America
Eosinophilic Esophagitis
Liacouras, CA
Gastroenterology Clinics of North America, 37(4): 989-+.
10.1016/j.gtc.2008.09.004
CrossRef

Diseases of the Esophagus
Is the etiology of eosinophilic esophagitis in adults a response to allergy or reflux injury? Study of cellular proliferation markers
Lewis, CJ; Lamb, CA; Kanakala, V; Pritchard, S; Armstrong, GR; Attwood, SEA
Diseases of the Esophagus, 22(3): 249-255.
10.1111/j.1442-2050.2008.00896.x
CrossRef

Radiology
Idiopathic eosinophilic esophagitis in adults: The ringed esophagus
Zimmerman, SL; Levine, MS; Rubesin, SE; Mitre, MC; Furth, EE; Laufer, I; Katzka, DA
Radiology, 236(1): 159-165.

10.1148/radiol.2361041100
CrossRef

Annals of Otology Rhinology and Laryngology
Clinical characteristics of eosinophilic esophagitis in children
Dauer, EH; Freese, DK; El-Youssef, M; Thompson, DM
Annals of Otology Rhinology and Laryngology, 114(): 827-833.

Endoscopy
Eosinophilic esophagitis in adults: What is the clinical significance?
Sgouros, SN; Bergele, C; Mantides, A
Endoscopy, 38(5): 515-520.
10.1055/s-2006-924983
CrossRef

Pediatric Transplantation
Audit of eosinophilic oesophagitis in children post-liver transplant
Noble, C; Francis, L; Withers, GW; Ee, LC; Lewindon, PJ
Pediatric Transplantation, 13(7): 827-830.
10.1111/j.1399-3046.2008.01063.x
CrossRef

Acta Medica Portuguesa
EOSINOPHILIC ESOPHAGITIS Increasing Incidence in Paediatric Population
Braga-Tavares, H; Teles, A; Nogueira, R; Rodrigues, FC; Costa, C
Acta Medica Portuguesa, 22(5): 579-588.

American Journal of Gastroenterology
The ringed esophagus: Histological features of GERD
Morrow, JB; Vargo, JJ; Goldblum, JR; Richter, JE
American Journal of Gastroenterology, 96(4): 984-989.

American Journal of Gastroenterology
Response to Drs. Bonis and Perrault et al
Vargo, JJ; Richter, JE
American Journal of Gastroenterology, 96(): 3440-3441.

Nature Clinical Practice Gastroenterology & Hepatology
Eosinophilic esophagitis: an overlooked entity in chronic dysphagia
Yan, BM; Shaffer, EA
Nature Clinical Practice Gastroenterology & Hepatology, 3(5): 285-289.
10.1038/ncpgasthep0491
CrossRef

International Journal of Pediatric Otorhinolaryngology
Eosinophilic esophagitis - A mimic of GERD
Noel, RJ; Tipnis, NA
International Journal of Pediatric Otorhinolaryngology, 70(7): 1147-1153.
10.1016/j.ijporl.2006.01.012
CrossRef

Gastroenterology
Eosinophilic esophagitis in children and adults: A systematic review and consensus recommendations for diagnosis and treatment
Furuta, GT; Liacouras, CA; Collins, MH; Gupta, SK; Justinich, C; Putnam, PE; Bonis, P; Hassall, E; Straumann, A; Rothenberg, ME
Gastroenterology, 133(4): 1342-1363.
10.1053/j.gastro.2007.08.017
CrossRef

Pediatric and Developmental Pathology
Severity of esophageal eosinophilia predicts response to conventional gastroesophageal reflux therapy
Ruchelli, E; Wenner, W; Voytek, T; Brown, K; Liacouras, C
Pediatric and Developmental Pathology, 2(1): 15-18.

Journal of Allergy and Clinical Immunology
The use of skin prick tests and patch tests to identify causative foods in eosinophilic esophagitis
Spergel, JM; Beausoleil, JL; Mascarenhas, M; Liacouras, CA
Journal of Allergy and Clinical Immunology, 109(2): 363-368.
10.1067/mai.2002.121458
CrossRef

Otolaryngologic Clinics of North America
Eosinophilic esophagitis: Its role in aerodigestive tract disorders
Thompson, DM; Arora, AS; Romero, Y; Dauer, EH
Otolaryngologic Clinics of North America, 39(1): 205-+.
10.1016/j.otc.2005.10.002
CrossRef

Alimentary Pharmacology & Therapeutics
Review article: the pathogenesis and management of eosinophilic oesophagitis
Furuta, GT; Straumann, A
Alimentary Pharmacology & Therapeutics, 24(2): 173-182.
10.1111/j.1365-2036.2006.02984.x
CrossRef

World Journal of Gastroenterology
Eosinophilic esophagitis
Gupte, AR; Draganov, PV
World Journal of Gastroenterology, 15(1): 17-24.
10.3748/wjg.15.17
CrossRef

American Journal of Gastroenterology
Esophageal Dilation in Eosinophilic Esophagitis: Effectiveness, Safety, and Impact on the Underlying Inflammation
Schoepfer, AM; Gonsalves, N; Bussmann, C; Conus, S; Simon, HU; Straumann, A; Hirano, I
American Journal of Gastroenterology, 105(5): 1062-1070.

10.1038/ajg.2009.657
CrossRef

Gastrointestinal Endoscopy
Eosinophilic esophagitis in adults: clinical, endoscopic, histologic findings, and response to treatment with fluticasone propionate
Remedios, M; Campbell, C; Jones, DM; Kerlin, P
Gastrointestinal Endoscopy, 63(1): 3-12.
10.1016/j.gie.2005.07.049
CrossRef

Annals of Allergy Asthma & Immunology
Eosinophilic esophagitis: an allergist's approach
Norvell, JM; Venarske, D; Hummell, DS
Annals of Allergy Asthma & Immunology, 98(3): 207-215.

World Journal of Gastroenterology
Eosinophilic gastroenteritis: Clinical experience with 15 patients
Chen, MJ; Chu, CH; Lin, SC; Shih, SC; Wang, TE
World Journal of Gastroenterology, 9(): 2813-2816.

Journal of Allergy and Clinical Immunology
Eosinophilic gastrointestinal disorders (EGID)
Rothenberg, ME
Journal of Allergy and Clinical Immunology, 113(1): 11-28.
10.1016/j.jaci.2003.10.047
CrossRef

Digestive and Liver Disease
Paediatric eosinophilic oesophagitis: Towards early diagnosis and best treatment
De Angelis, P; Markowitz, JE; Torroni, F; Caldaro, T; Pane, A; Morino, G; Wietrzykowska, RS; di Abriola, GF; Ponticelli, A; Dall'Oglio, L
Digestive and Liver Disease, 38(4): 245-251.
10.1016/j.dld.2005.08.004
CrossRef

Journal of Pediatrics
Predictors of Response to Proton Pump Inhibitor Therapy among Children with Significant Esophageal Eosinophilia
Dranove, JE; Horn, DS; Davis, MA; Kernek, KM; Gupta, SK
Journal of Pediatrics, 154(1): 96-100.
10.1016/j.jpeds.2008.07.042
CrossRef

Medizinische Klinik
Impaction of a "Sausage Bread" in the Esophagus - First Manifestation of an Eosinophilic Esophagitis in a 17-Year-Old Patient
Gabele, E; Endlicher, E; Zuber-Jerger, I; Uller, W; Eder, F; Scholmerich, J
Medizinische Klinik, 104(5): 386-391.
10.1007/s00063-009-1077-8
CrossRef

Revista Medica De Chile
Eosinophilic esophagitis. Report of three cases
Gonzalez, CG; Torres, J; Molina, R; Harris, PR
Revista Medica De Chile, 137(5): 666-671.

Schweizerische Medizinische Wochenschrift
Idiopathic eosinophilic oesophagitis: a case report
Fischer, CA; Reimers, MP
Schweizerische Medizinische Wochenschrift, 130(): 131S-133S.

Gut
Diversity in the oesophageal phenotypic response to gastro-oesophageal reflux: immunological determinants
Fitzgerald, RC; Onwuegbusi, BA; Bajaj-Elliott, M; Saeed, IT; Burnham, WR; Farthing, MJG
Gut, 50(4): 451-459.

Gastrointestinal Endoscopy
Eosinophilic esophagitis: it's not just kid's stuff

Eosinophilic esophagitis: It's not just kid's stuff
Fox, VL; Nurko, S; Furuta, GT
Gastrointestinal Endoscopy, 56(2): 260-270.
10.1067/mge.2002.126390
CrossRef

Journal of Allergy and Clinical Immunology
Pollen and eosinophilic esophagitis
Fogg, MI; Ruchelli, E; Spergel, JM
Journal of Allergy and Clinical Immunology, 112(4): 796-797.

American Journal of Gastroenterology
Predictors of early recurrence of benign esophageal strictures: What about eosinophilic esophagitis?
Said, A; Gaumnitz, E; Reichelderfer, M
American Journal of Gastroenterology, 99(1): 184.

Journal of Allergy and Clinical Immunology
Update on food allergy
Sampson, HA
Journal of Allergy and Clinical Immunology, 113(5): 805-819.
10.1016/j.jaci.2004.03.014
CrossRef

Acta Paediatrica
The natural course of gastro-oesophageal reflux
Salvatore, S; Hauser, B; Vandenplas, Y
Acta Paediatrica, 93(8): 1063-1069.
10.1080/08035250410026833
CrossRef

Journal of Gastroenterology
A Japanese case of eosinophilic esophagitis
Furuta, K; Adachi, K; Kowari, K; Mishima, Y; Imaoka, H; Kadota, C; Koshino, K; Miyake, T; Kadowaki, Y; Furuta, K; Kazumori, H; Sato, S; Ishihara, S; Amano, Y; Honda, M; Kinoshita, Y
Journal of Gastroenterology, 41(7): 706-710.
10.1007/s00535-006-1827-9
CrossRef

Clinical Gastroenterology and Hepatology
Potential of blood eosinophils, eosinophil-derived neurotoxin, and eotaxin-3 as biomarkers of eosinophilic esophagitis
Konikoff, MR; Blanchard, C; Kirby, C; Buckmeier, BK; Cohen, MB; Heubi, JE; Putnam, PE; Rothenberg, ME
Clinical Gastroenterology and Hepatology, 4(): 1328-1336.
10.1016/j.cgh.2006.08.013
CrossRef

Expert Opinion on Pharmacotherapy
Eosinophilic esophagitis: management and pharmacotherapy
De Angelis, P; Morino, G; Pane, A; Torroni, F; Francalanci, P; Sabbi, T; Foschia, F; Caldaro, T; di Abriola, GF; Dall'Oglio, L
Expert Opinion on Pharmacotherapy, 9(5): 731-740.
10.1517/14656566.9.5.731
CrossRef

International Journal of Clinical Practice
Eosinophilic oesophagitis: a common cause of dysphagia in young adults?
Basavaraju, KP; Wong, T
International Journal of Clinical Practice, 62(7): 1096-1107.
10.1111/j.1742-1241.2008.01782.x
CrossRef

Best Practice & Research in Clinical Gastroenterology
Eosinophils and allergic diseases of the gastrointestinal tract
Bischoff, SC; Ulmer, FA
Best Practice & Research in Clinical Gastroenterology, 22(3): 455-479.
10.1016/j.bpg.2007.11.010
CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Guidelines for evaluation and treatment of gastroesophageal reflux in infants and children: Recommendations of the North American Society for Pediatric Gastroenterology and Nutrition

Rudolph, CD; Mazur, LJ; Liptak, GS; Baker, RD; Boyle, JT; Colletti, RB; Gerson, WT; Werlin, SL
Journal of Pediatric Gastroenterology and Nutrition, 32(): S1-S31.

Pediatric Clinics of North America
Food allergy - Mechanisms, diagnosis, and management in children
Spergel, JM; Pawlowski, NA
Pediatric Clinics of North America, 49(1): 73-+.

Gastrointestinal Endoscopy
High-resolution EUS in children with eosinophilic "allergic" esophagitis
Fox, VL; Nurko, S; Teitelbaum, JE; Badizadegan, K; Furuta, GT
Gastrointestinal Endoscopy, 57(1): 30-36.

Journal of Immunology
IL-5 promotes eosinophil trafficking to the esophagus
Mishra, A; Hogan, SP; Brandt, EB; Rothenberg, ME
Journal of Immunology, 168(5): 2464-2469.

American Journal of Gastroenterology
Corrugated (multiple) ringed esophagus, GERD versus allergy?
Langdon, DE
American Journal of Gastroenterology, 97(5): 1257-1258.

Journal of Pediatric Gastroenterology and Nutrition
The pediatric esophagus comes of age
Thomson, M
Journal of Pediatric Gastroenterology and Nutrition, 34(): S40-S45.
10.1097/01.MPG.0000017296.92960.A3
CrossRef

Pediatrics
Clinical aspects of gastrointestinal food allergy in childhood
Sicherer, SH
Pediatrics, 111(6): 1609-1616.

European Journal of Pediatric Surgery
Non stenotic food impaction due to eosinophilic esophagitis: A potential surgical emergency
Luis, AL; Rinon, C; Encinas, JL; Prieto, G; Molina, M; Sarria, J; Olivares, P; Tovar, JA
European Journal of Pediatric Surgery, 16(6): 399-402.
10.1055/s-2006-924747
CrossRef

Journal of Allergy and Clinical Immunology
Pediatric patients with eosinophilic esophagitis: An 8-year follow-up
Assa'ad, AH; Putnam, PE; Collins, MH; Akers, RM; Jameson, SC; Kirby, CL; Buckmeier, BK; Bullock, JZ; Collier, AR; Konikoff, MR; Noel, RJ; Guajardo, JR; Rothenberg, ME
Journal of Allergy and Clinical Immunology, 119(3): 731-738.
10.1016/j.jaci.2006.10.044
CrossRef

Best Practice & Research in Clinical Gastroenterology
Gastro-oesophageal reflux disease and motility disorders
Salvatore, S; Vandenplas, Y
Best Practice & Research in Clinical Gastroenterology, 17(2): 163-179.
10.1053/ybega.2003.366
CrossRef

Mayo Clinic Proceedings
Topical corticosteroid treatment of dysphagia due to eosinophilic esophagitis in adults
Arora, AS; Perrault, J; Smyrk, TC
Mayo Clinic Proceedings, 78(7): 830-835.

American Journal of Gastroenterology
Predictors of early recurrence of benign esophageal strictures: What about eosinophilic esophagitis?
Liacouras, CA; Markowitz, JE

American Journal of Gastroenterology, 99(1): 182-183.
10.1046/j.1572-0241.2003.04014.x
CrossRef

Annals of Otology Rhinology and Laryngology
Subglottic stenosis complicated by allergic esophagitis - Case report
Hartnick, CJ; Liu, JH; Cotton, RT; Rudolph, C
Annals of Otology Rhinology and Laryngology, 111(1): 57-60.

Journal of Laryngology and Otology
Paediatric eosinophilic oesophagitis presenting to the otolaryngologist
Harris, R; Mitton, S; Chong, S; Daya, H
Journal of Laryngology and Otology, 124(1): 96-100.
10.1017/S0022215109990636
CrossRef

Archives of Otolaryngology-Head & Neck Surgery
Laryngeal cleft and eosinophilic gastroenteritis - Report of 2 cases
Goldstein, NA; Putnam, PE; Dohar, JE
Archives of Otolaryngology-Head & Neck Surgery, 126(2): 227-230.

Journal of Allergy and Clinical Immunology
Pathogenesis and clinical features of eosinophilic esophagitis
Rothenberg, MA; Mishra, A; Collins, MH; Putnam, PE
Journal of Allergy and Clinical Immunology, 108(6): 891-894.
10.1067/mai.2001.120095
CrossRef

Journal of Pediatric Surgery
Successful medical treatment of two patients with eosinophilic oesophagitis
De Agustin, JC; Sanz, N; Canals, MJ; Alvarez, E; Morales, JL; Soler, J; Ollero, JC; Vazquez, J
Journal of Pediatric Surgery, 37(2): 207-213.
10.1053/jpsu.2002.30256
CrossRef

Gastroenterology
Eosinophilic esophagitis in children: Immunopathologicial analysis and response to fluticasone propionate
Teitelbaum, JE; Fox, VL; Twarog, FJ; Nurko, S; Antonioli, D; Gleich, G; Badizadegan, K; Furuta, GT
Gastroenterology, 122(5): 1216-1225.
10.1053/gast.2002.32998
CrossRef

American Journal of Gastroenterology
Eosinophilic esophagitis disease in children from West Virginia: A review of the last decade (1995-2004)
Gill, R; Durst, P; Rewalt, M; Elitsur, Y
American Journal of Gastroenterology, 102(): 2281-2285.
10.1111/j.1572-0241.2007.01352.x
CrossRef

Clinical and Experimental Allergy
Eosinophils: Biological properties and role in health and disease
Hogan, SP; Rosenberg, HF; Moqbel, R; Phipps, S; Foster, PS; Lacy, P; Kay, AB; Rothenberg, ME
Clinical and Experimental Allergy, 38(5): 709-750.
10.1111/j.1365-2222.2008.02958.x
CrossRef

Best Practice & Research in Clinical Gastroenterology
Idiopathic eosinophilic gastrointestinal diseases in adults
Straumann, A
Best Practice & Research in Clinical Gastroenterology, 22(3): 481-496.
10.1016/j.bpg.2007.09.001
CrossRef

Journal of Gastroenterology and Hepatology
Eosinophilic esophagitis in children with celiac disease
Ooi, CY; Day, AS; Jackson, R; Bohane, TD; Tobias, V; Lemberg, DA
Journal of Gastroenterology and Hepatology, 23(7): 1144-1148.
10.1111/j.1440-1746.2007.05239.x
CrossRef

American Journal of Gastroenterology
Treatment of Eosinophilic Esophagitis: Overview, Current Limitations, and Future Direction
Bohm, M; Richter, JE
American Journal of Gastroenterology, 103(): 2635-2644.
10.1111/j.1572-0241.2008.02116.x
CrossRef

Immunology and Allergy Clinics of North America
Mechanism of Eosinophilic Esophagitis
Mishra, A
Immunology and Allergy Clinics of North America, 29(1): 29-+.
10.1016/j.iac.2008.09.010
CrossRef

Annals of Allergy Asthma & Immunology
A 17-month-old boy with periorbital swelling
Ko, J; Magid, MS; Benkov, KJ; Chehade, M; Nowak-Wegrzyn, A
Annals of Allergy Asthma & Immunology, 93(3): 220-226.

Annals of Allergy Asthma & Immunology
Treatment of eosinophilic esophagitis with specific food elimination diet directed by a combination of skin prick and patch tests
Spergel, JM; Andrews, T; Brown-Whitehorn, TF; Beausoleil, JL; Liacouras, CA
Annals of Allergy Asthma & Immunology, 95(4): 336-343.

Annals of Otology Rhinology and Laryngology
Airway manifestations of pediatric eosinophilic esophagitis: A clinical and histopathologic report of an emerging association
Dauer, EH; Ponikau, JU; Smyrk, TC; Murray, JA; Thompson, DM
Annals of Otology Rhinology and Laryngology, 115(7): 507-517.

Gastroenterology
A randomized, double-blind, placebo-controlled trial of fluticasone propionate for pediatric eosinophilic esophagitis
Konikoff, MR; Noel, RJ; Blanchard, C; Kirby, C; Jameson, SC; Buckmeier, BK; Akers, R; Cohen, MB; Collins, MH; Assa'ad, AH; Aceves, SS; Putnam, PE; Rothenberg, ME
Gastroenterology, 131(5): 1381-1391.
10.1053/j.gastro.2006.08.033
CrossRef

Dysphagia
Eosinophilic esophagitis in infants and toddlers
Pentiuk, SP; Miller, CK; Kaul, A
Dysphagia, 22(1): 44-48.
10.1007/s00455-006-9040-9
CrossRef

Dysphagia
Intermittent dysphagia for solids associated with a multiringed esophagus: Clinical features and response to dilatation
Lee, GSC; Craig, PI; Freiman, JS; de Carle, D; Cook, IJ
Dysphagia, 22(1): 55-62.
10.1007/s00455-006-9043-6
CrossRef

Archives of Disease in Childhood
Upregulated eotaxin expression and T cell infiltration in the basal and papillary epithelium in cows' milk associated reflux oesophagitis
Butt, AM; Murch, SH; Ng, CL; Kitching, P; Montgomery, SM; Phillips, AD; Walker-Smith, JA; Thomson, MA
Archives of Disease in Childhood, 87(2): 124-130.

Gastrointestinal Endoscopy
Clinical and endoscopic features of eosinophilic esophagitis in adults
Croese, J; Fairley, SK; Masson, JW; Chong, AKH; Whitaker, DA; Kanowski, PA; Walker, NI
Gastrointestinal Endoscopy, 58(4): 516-522.
PII S0016-5107(03)01870-4
CrossRef

Digestive Diseases and Sciences
Eosinophilic esophagitis - Strictures, impactions, dysphagia

Eosinophilic esophagitis - Strictures, impactions, dysphagia
Khan, S; Orenstein, SR; Di Lorenzo, C; Kocoshis, SA; Putnam, PE; Sigurdsson, L; Shalaby, TM
Digestive Diseases and Sciences, 48(1): 22-29.

Journal of Pediatric Surgery
Eosinophilic infiltration of the esophagus: Gastroesophageal reflux versus eosinophilic esophagitis in children - Discussion on daily practice
Cury, EK; Schraibman, V; Faintuch, S
Journal of Pediatric Surgery, 39(2): -.
ARTN e4
CrossRef

Gastroenterologie Clinique Et Biologique
Eosinophilic esophagitis: 3 case reports
Budin, C; Villard-Truc, F; Rivet, C; Dumortier, J; Legall, C; Bouvier, R; Scoazec, JY; Lachaux, A
Gastroenterologie Clinique Et Biologique, 29(1): 73-75.

Clinical Gastroenterology and Hepatology
Effect of six-food elimination diet on clinical and histologic outcomes in eosinophilic esophagitis
Kagalwalla, AF; Sentongo, TA; Ritz, S; Hess, T; Nelson, SP; Emerick, KM; Melin-Aldana, H; Li, BUK
Clinical Gastroenterology and Hepatology, 4(9): 1097-1102.
10.1016/j.cgh.2006.05.026
CrossRef

American Journal of Gastroenterology
3-Yr-Follow-Up of Topical Corticosteroid Treatment for Eosinophilic Esophagitis in Adults
Helou, EF; Simonson, J; Arora, AS
American Journal of Gastroenterology, 103(9): 2194-2199.
10.1111/j.1572-0241.2008.01989.x
CrossRef

American Journal of Gastroenterology
The spectrum of pediatric eosinophilic esophagitis beyond infancy: A clinical series of 30 children
Orenstein, SR; Shalaby, TM; Di Lorenzo, C; Putnam, PE; Sigurdsson, L; Kocoshis, SA
American Journal of Gastroenterology, 95(6): 1422-1430.

Journal of Clinical Investigation
An etiological role for aeroallergens and eosinophils in experimental esophagitis
Mishra, A; Hogan, SP; Brandt, EB; Rothenberg, ME
Journal of Clinical Investigation, 107(1): 83-90.

Pediatric Annals
Chronic abdominal pain: Inflammatory dowel disease and eosinophilic gastroenteropathy
Gokhale, R
Pediatric Annals, 30(1): 49-55.

Journal of Pediatric Gastroenterology and Nutrition
Eosinophilic esophagitis - Is it in the air?
Elitsur, Y
Journal of Pediatric Gastroenterology and Nutrition, 34(3): 325-326.

Journal of Pediatric Gastroenterology and Nutrition
Eosinophilic esophagitis in children and adults
Liacouras, CA
Journal of Pediatric Gastroenterology and Nutrition, 37(): S23-S28.

Gastrointestinal Endoscopy
Association of eosinophilic inflammation with esophageal food impaction in adults
Desai, TK; Stecevic, V; Chang, CH; Goldstein, NS; Badizadegan, K; Furuta, GT
Gastrointestinal Endoscopy, 61(7): 795-801.
PII S0016-5107(05)00313-5

CrossRef

Digestive and Liver Disease
Ten years of eosinophilic oesophagitis: Small steps or giant leaps?
Markowitz, JE; Liacouras, CA
Digestive and Liver Disease, 38(4): 251-253.
10.1016/j.dld.2005.12.002
CrossRef

American Journal of Gastroenterology
Cysteinyl leukotriene levels in esophageal mucosal biopsies of children with eosinophilic inflammation: Are they all the same?
Gupta, SK; Peters-Golden, M; Fitzgerald, JF; Croffie, JM; Pfefferkorn, MD; Molleston, JP; Corkins, MR; Lim, JR
American Journal of Gastroenterology, 101(5): 1125-1128.
10.1111/j.1572-0241.2006.00557.x
CrossRef

Diseases of the Esophagus
Eosinophilic esophagitis: an update
Ferguson, DD; Foxx-Orenstein, AE
Diseases of the Esophagus, 20(1): 2-8.
10.1111/j.1442-2050.2007.00649.x
CrossRef

Gastroenterology Clinics of North America
Eosinophilic esophagitis in adults
Prasad, GA; Talley, NJ
Gastroenterology Clinics of North America, 37(2): 349-+.
10.1016/j.gtc.2008.03.002
CrossRef

American Journal of Gastroenterology
Multiple esophageal rings: An association with eosinophilic esophagitis - Case report and review of the literature
Siafakas, CG; Ryan, CK; Brown, MR; Miller, TL
American Journal of Gastroenterology, 95(6): 1572-1575.

Annals of Allergy Asthma & Immunology
Montelukast reduces peripheral blood eosinophilia but not tissue eosinophilia or symptoms in a patient with eosinophilic gastroenteritis and esophageal stricture
Daikh, BE; Ryan, CK; Schwartz, RH
Annals of Allergy Asthma & Immunology, 90(1): 23-27.

Gastrointestinal Endoscopy
Fragility of the esophageal mucosa: A pathognomonic endoscopic sign of primary eosinophilic esophagitis?
Straumann, A; Rossi, L; Simon, HU; Heer, P; Spichtin, HP; Beglinger, C
Gastrointestinal Endoscopy, 57(3): 407-412.
10.1067/mge.2003.123
CrossRef

Clinical Gastroenterology and Hepatology
Eosinophilic esophagitis: A 10-year experience in 381 children
Liacouras, CA; Spergel, JM; Ruchelli, E; Verma, R; Mascarenhas, M; Semeao, E; Flick, J; Kelly, J; Brown-Whitehorn, T; Mamula, P; Markowitz, JE
Clinical Gastroenterology and Hepatology, 3(): 1198-1206.

Archives of Disease in Childhood
Rapidly increasing prevalence of eosinophilic oesophagitis in Western Australia
Cherian, S; Smith, NM; Forbes, DA
Archives of Disease in Childhood, 91(): 1000-1004.
10.1136/adc.2006.100974
CrossRef

Advances in Immunology, Vol 78
Gastrointestinal eosinophils in health and disease
Rothenberg, ME; Mishra, A; Brandt, EB; Hogan, SP
Advances in Immunology, Vol 78, 78(): 291-328.

Gastroenterology Clinics of North America
Gastroesophageal reflux disease in children
Orenstein, SR; Izadnia, F; Khan, S
Gastroenterology Clinics of North America, 28(4): 947-+.

Jama-Journal of the American Medical Association
The spectrum of pediatric gastroesophageal reflux
Furuta, GT; Nurko, S; Bousvaros, A; Antonioli, D; Badizadegan, K
Jama-Journal of the American Medical Association, 284(): 3125.

American Journal of Gastroenterology
Fluticasone in eosinophilic corrugated ringed esophagus
Langdon, DE
American Journal of Gastroenterology, 96(3): 926-927.

Zeitschrift Fur Gastroenterologie
Differencial diagnosis of gastroesophageal reflux disease - eosinophilic esophagitis: Case report
Franzius, M; Stolte, M; Porschen, R
Zeitschrift Fur Gastroenterologie, 43(4): 385-389.
10.1055/s-2005-857916
CrossRef

Gastrointestinal Endoscopy
Eosinophilic esophagitis: the endoscopist's enigma
Straumann, A; Beglinger, C
Gastrointestinal Endoscopy, 63(1): 13-15.
10.1016/j.gie.2005.09.010
CrossRef

American Journal of Gastroenterology
Eosinophils in the esophagus - Peptic or allergic eosinophilic esophagitis? Case series of three patients with esophageal eosinophilia
Ngo, P; Furuta, GT; Antonioli, DA; Fox, VL
American Journal of Gastroenterology, 101(7): 1666-1670.
10.1111/j.1572-0241.2006.00562.x
CrossRef

Gastroenterology Clinics of North America
Food allergies and eosinophilic gastrointestinal illness
Gonsalves, N
Gastroenterology Clinics of North America, 36(1): 75-+.
10.1016/j.gtc.2007.01.003
CrossRef

Clinical Gastroenterology and Hepatology
Atopic characteristics of adult patients with eosinophilic esophagitis
Roy-Ghanta, S; Larosa, DF; Katzka, DA
Clinical Gastroenterology and Hepatology, 6(5): 531-535.
10.1016/j.cgh.2007.12.045
CrossRef

American Journal of Gastroenterology
ACG Clinical Guideline: Evidenced Based Approach to the Diagnosis and Management of Esophageal Eosinophilia and Eosinophilic Esophagitis (EoE)
Dellon, ES; Gonsalves, N; Hirano, I; Furuta, GT; Liacouras, CA; Katzka, DA
American Journal of Gastroenterology, 108(5): 679-692.
10.1038/ajg.2013.71
CrossRef

Gastroenterology Clinics of North America
Eosinophilic Esophagitis
Dellon, ES
Gastroenterology Clinics of North America, 42(1): 133-+.
10.1016/j.gtc.2012.11.008
CrossRef

The American Journal of Surgical Pathology
Allergic Esophagitis in Children: A Clinicopathological Entity
Walsh, SV; Antonioli, DA; Goldman, H; Fox, VL; Bousvaros, A; Leichtner, AM; Furuta, GT
The American Journal of Surgical Pathology, 23(4): 390-396.

Applied Immunohistochemistry & Molecular Morphology
Use of MIB-1 in the Assessment of Esophageal Biopsy Specimens from Patients with Gastroesophageal Reflux Disease in Well- and Poorly Oriented Areas
Haber, MM; Lu, L; Modi, A; Garcia, FU
Applied Immunohistochemistry & Molecular Morphology, 10(2): 128-133.

PDF (1566)

Current Opinion in Allergy and Clinical Immunology
IgE and non-IgE-mediated food allergy: treatment in 2007
Chehade, M
Current Opinion in Allergy and Clinical Immunology, 7(3): 264-268.
10.1097/ACI.0b013e32814a5607
PDF (92) | CrossRef

Current Opinion in Allergy and Clinical Immunology
Eosinophilic esophagitis in adults and children: evidence for a food allergy component in many patients
Spergel, JM
Current Opinion in Allergy and Clinical Immunology, 7(3): 274-278.
10.1097/ACI.0b013e32813aee4a
PDF (92) | CrossRef

Current Opinion in Allergy and Clinical Immunology
Food allergy and eosinophilic esophagitis
Chehade, M; Aceves, SS
Current Opinion in Allergy and Clinical Immunology, 10(3): 231-237.
10.1097/ACI.0b013e328338cbab
PDF (188) | CrossRef

Current Opinion in Gastroenterology
Scope of drug-induced, infectious and allergic esophageal injury
Geagea, A; Cellier, C
Current Opinion in Gastroenterology, 24(4): 496-501.
10.1097/MOG.0b013e328304de94
PDF (104) | CrossRef

Current Opinion in Gastroenterology
What's new in the diagnosis and therapy of eosinophilic esophagitis?
Straumann, A; Hruz, P
Current Opinion in Gastroenterology, 25(4): 366-371.
10.1097/MOG.0b013e32832ad89d
PDF (138) | CrossRef

Current Opinion in Pediatrics
Medical management of gastroesophageal reflux
Brown, P
Current Opinion in Pediatrics, 12(3): 247-250.

PDF (114)

Current Opinion in Pediatrics
Corticosteroids in the treatment of gastrointestinal disease
Hyams, JS
Current Opinion in Pediatrics, 12(5): 451-455.

Current Opinion in Pediatrics
Eosinophilic esophagitis
Liacouras, CA; Ruchelli, E

Current Opinion in Pediatrics, 16(5): 560-566.
10.1097/01.mop.0000141071.47572.eb
PDF (83) | CrossRef

Current Opinion in Pediatrics
Eosinophilic esophagitis
Brown-Whitehorn, T; Liacouras, CA
Current Opinion in Pediatrics, 19(5): 575-580.
10.1097/MOP.0b013e3282bf6ebf
PDF (100) | CrossRef

Current Opinion in Pediatrics
Eosinophilic esophagitis
Noel, RJ; Rothenberg, ME
Current Opinion in Pediatrics, 17(6): 690-694.

PDF (195)

European Journal of Gastroenterology & Hepatology
Eosinophilic esophagitis in adults: a systematic review
Sgouros, SN; Bergele, C; Mantides, A
European Journal of Gastroenterology & Hepatology, 18(2): 211-217.

PDF (84)

European Journal of Gastroenterology & Hepatology
Eosinophils and gut dysmotility
Attwood, SE
European Journal of Gastroenterology & Hepatology, 17(9): 891-892.

PDF (40)

Journal of Clinical Gastroenterology
Distinguishing Eosinophilic Esophagitis in Pediatric Patients: Clinical, Endoscopic, and Histologic Features of An Emerging Disorder
Aceves, SS; Newbury, RO; Dohil, R; Schwimmer, J; Bastian, JF
Journal of Clinical Gastroenterology, 41(3): 252-256.
10.1097/01.mcg.0000212639.52359.f1
PDF (156) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Vomiting and Gastric Motility in Infants With Cow's Milk Allergy
Ravelli, AM; Tobanelli, P; Volpi, S; Ugazio, AG
Journal of Pediatric Gastroenterology and Nutrition, 32(1): 59-64.

PDF (723)

Journal of Pediatric Gastroenterology and Nutrition
Cytokine Expression in Normal and Inflamed Esophageal Mucosa: A Study into the Pathogenesis of Allergic Eosinophilic Esophagitis
Gupta, SK; Fitzgerald, JF; Kondratyuk, T; HogenEsch, H
Journal of Pediatric Gastroenterology and Nutrition, 42(1): 22-26.

PDF (320)

Journal of Pediatric Gastroenterology and Nutrition
Activated Mucosal Mast Cells Differentiate Eosinophilic (Allergic) Esophagitis From Gastroesophageal Reflux Disease
Kirsch, R; Bokhary, R; Marcon, MA; Cutz, E
Journal of Pediatric Gastroenterology and Nutrition, 44(1): 20-26.
10.1097/MPG.0b013e31802c0d06
PDF (664) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Childhood Esophagitis: Then and Now
Lee, JJ; Baker, RD; Khan, AR; Baker, SS
Journal of Pediatric Gastroenterology and Nutrition, 48(1): 37-40.
10.1097/MPG.0b013e31817c0399
PDF (84) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Adherent White Plaques: An Endoscopic Finding in Eosinophilic Esophagitis
Sundaram, S; Sunku, B; Nelson, SP; Sentongo, T; Melin-Aldana, H; Kumar, R; Li, BU
Journal of Pediatric Gastroenterology and Nutrition, 38(2): 208-212.

PDF (487)

Journal of Pediatric Gastroenterology and Nutrition
Cow's Milk Protein–induced Eosinophilic Esophagitis in a Child With Gluten-sensitive Enteropathy
Kagalwalla, AF; Shah, A; Ritz, S; Melin-Aldana, H; Li, B
Journal of Pediatric Gastroenterology and Nutrition, 44(3): 386-388.
10.1097/01.mpg.0000243430.32087.5c
PDF (124) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Eosinophils in the Esophagus: Acid is Not the Only Cause
Furuta, GT
Journal of Pediatric Gastroenterology and Nutrition, 26(4): 468-471.

Journal of Pediatric Gastroenterology and Nutrition
Dyspepsia in Children and Adolescents: A Prospective Study
Hyams, JS; Davis, P; Sylvester, FA; Zeiter, DK; Justinich, CJ; Lerer, T
Journal of Pediatric Gastroenterology and Nutrition, 30(4): 413-418.

Journal of Pediatric Gastroenterology and Nutrition
Long-term Follow-up of Symptoms and Peripheral Eosinophil Counts in Seven Children with Eosinophilic Esophagitis
Esposito, S; Marinello, D; Paracchini, R; Guidali, P; Oderda, G
Journal of Pediatric Gastroenterology and Nutrition, 38(4): 452-456.

PDF (57)

Journal of Pediatric Gastroenterology and Nutrition
Severity of Basal Cell Hyperplasia Differs in Reflux Versus Eosinophilic Esophagitis
Steiner, SJ; Kernek, KM; Fitzgerald, JF
Journal of Pediatric Gastroenterology and Nutrition, 42(5): 506-509.

10.1097/01.mpg.0000221906.06899.1b
PDF (118) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Eosinophilic Esophagitis Associated With Anastomotic Strictures After Esophageal Atresia Repair
Batres, LA; Liacouras, C; Schnaufer, L; Mascarenhas, MR
Journal of Pediatric Gastroenterology and Nutrition, 35(2): 224-226.

PDF (149)

Journal of Pediatric Gastroenterology and Nutrition
Eosinophilic Oesophagitis: Epidemiology, Clinical Aspects, and Association to Allergy
Nielsen, RG; Husby, S
Journal of Pediatric Gastroenterology and Nutrition, 45(3): 281-289.
10.1097/MPG.0b013e31806210c8
PDF (187) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Esophageal Subepithelial Fibrosis in Children With Eosinophilic Esophagitis
Chehade, M; Sampson, HA; Morotti, RA; Magid, MS
Journal of Pediatric Gastroenterology and Nutrition, 45(3): 319-328.
10.1097/MPG.0b013e31806ab384
PDF (491) | CrossRef

Journal of Pediatric Gastroenterology and Nutrition
Esophageal Eosinophilia In Children With Dysphagia
Cheung, KM; Oliver, MR; Cameron, DJ; Catto-Smith, AG; Chow, CW
Journal of Pediatric Gastroenterology and Nutrition, 37(4): 498-503.

PDF (372)

Journal of Pediatric Gastroenterology and Nutrition
Eosinophilic Esophagitis in Children: Symptoms, Histology and pH Probe Results
Sant'Anna, A; Rolland, S; Fournet, J; Yazbeck, S; Drouin, E
Journal of Pediatric Gastroenterology and Nutrition, 39(4): 373-377.

PDF (357)

Journal of Pediatric Gastroenterology and Nutrition
Esophageal Candidiasis in an Infant With Reflux Esophagitis
Uc, A; North, P; Burks, W
Journal of Pediatric Gastroenterology and Nutrition, 31(5): 572-574.

PDF (385)

Journal of Pediatric Gastroenterology and Nutrition
Bilateral Atopic Cataracts in a Child with Eosinophilic Esophagitis: An Association to Look Out For
Karthik, SV; Casson, DH
Journal of Pediatric Gastroenterology and Nutrition, 39(5): 557-559.

PDF (267)

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