

A MULTICENTER STUDY ON THE PREVALENCE OF EOSINOPHILIC ESOPHAGITIS IN THE RUSSIAN FEDERATION AMONG ADULTS UNDERGOING UPPER ENDOSCOPY

Valeria Kaibysheva, Sergey Kashin, Sergey Pirogov, Zalina Galkova, Zarina Galeeva, Ekaterina Mayat, Evgeny Fedorov, Roman Kuvaev, Natalya Vidyaeva, Tatiana Ilchishina, Alexandr Smirnov, Sergey Shapovaliantc, Evgeny Nikonov

Pirogov Russian National Research Medical University, Yaroslavl Clinical Oncology Hosp., Department of endoscopy, Herzen Moscow Cancer Research Institute, Pavlov First Saint Petersburg State Medical University

AIM: Eosinophilic oesophagitis (EoE) is a common cause of oesophageal disease in Europe and the USA. Limited data have been reported on its epidemiology in the Russian Federation. The aim of this study was to evaluate the prevalence of EoE in the Russian Federation among adult patients undergoing esophagogastroduodenoscopy (EGDS) due to upper gastrointestinal (UGI) symptoms.

METHODS: This study was conducted in 9 endoscopy departments in the Russian Federation (4 in Moscow, 1 in Yaroslavl, 1 in Ivanovo, 1 in Kazan, 2 in Saint Petersburg, 1 in Ekaterinburg) between October 2017 and March 2019. We enrolled 49240 patients aged 18 to 80 years old who underwent an EGDS due to UGI symptoms (heartburn, dysphagia, food impaction, acid regurgitation, chest pain, epigastric pain, nausea, vomiting). Patients with endoscopic findings of EoE (oedema, rings, exudates, furrows, and strictures) were underwent oesophageal biopsy (at least 6 biopsies were obtained from the proximal and distal oesophagus to quantify the maximum eosinophil count per high-power field (eos/hpf; hpf=0.24 mm). Patients were diagnosed with EoE if the number of eosinophils was ≥ 15 .

RESULTS: EGDS revealed endoscopic features of EoE in 137 patients. Oesophageal biopsy confirmed eosinophilic oesophagitis in 62 cases. EoE patients had a mean age of 38.2 years (range 20-67 years), 83.3% of patients were under 45 years of age, 79.1% patients were male. Individuals with EoE suffered predominantly from dysphagia (62.5%), heartburn (54.1%), food impaction (37.5%), and nausea (29.1%). 79.1% of EoE patients had a past history of gastroesophageal reflux disease, 25% suffered from allergic rhinitis, 33.3% had atopic dermatitis, 8.3% -asthma. 1 patient had a family history of EoE (his sibling and mother also suffered from dysphagia due to EoE).

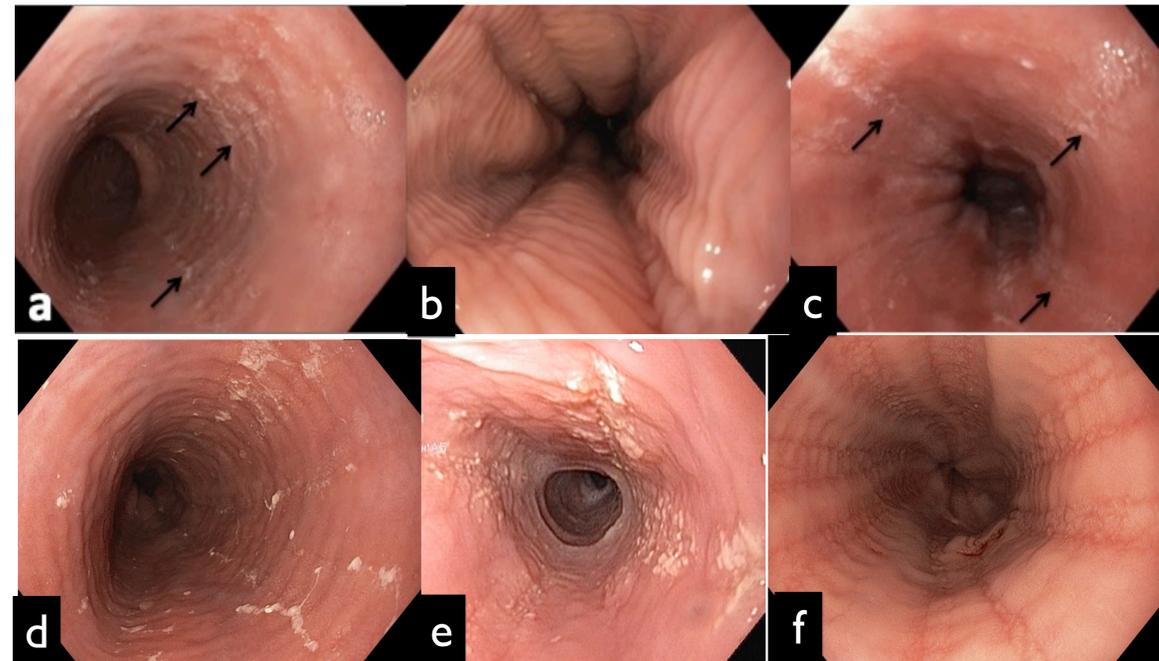


Figure I. Endoscopic features of EoE:
a,d. acute inflammation with edema, white exudate
b. rings
c,f. furrows
e. stricture

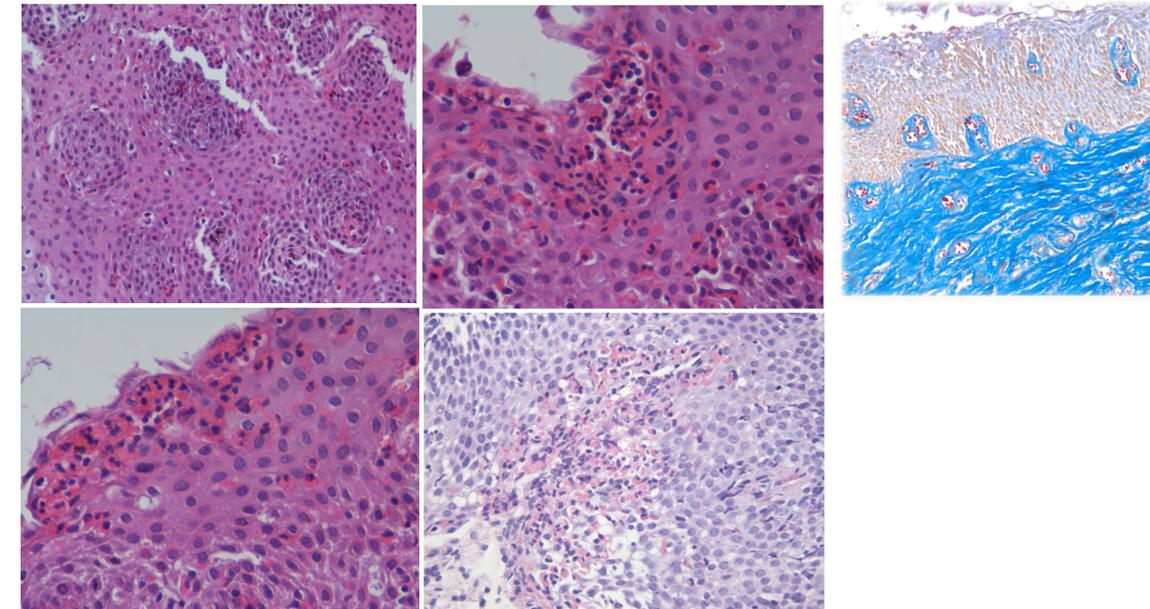


Figure II. Histologic features of EoE: intraepithelial eosinophil group or aggregate, subepithelial fibrosis

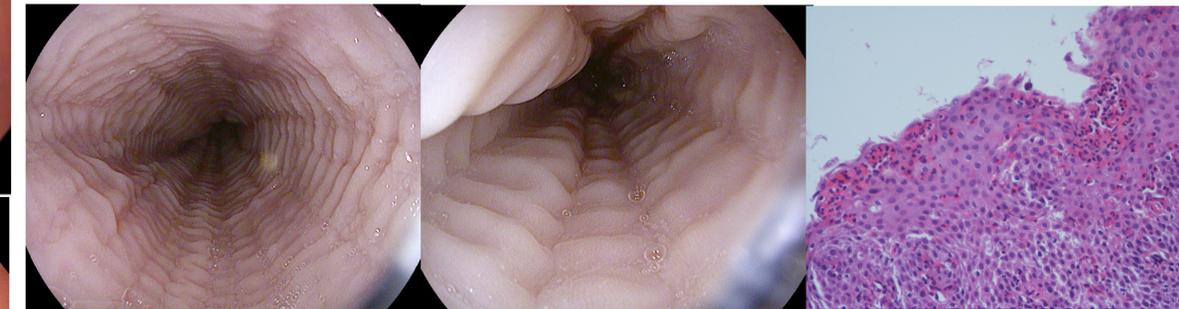


Figure III. Endoscopic and histologic examination of 33 years old woman with dysphagia

CONCLUSION: The prevalence of EoE among adult patients undergoing upper endoscopy in the Russian Federation is 1 case for 794 UGI endoscopies. The characteristic findings of EoE patients included male gender, age under 45 years and history of atopic diseases.