

Epidemiology, Natural History, and Risk Stratification of Chron's Disease

Satimai Aniwan, MD^{a,b}, Sang Hyoung Park, MD^{a,c},
Edward V. Loftus Jr, MD^{a,*}

KEYWORDS

• Chron's disease • Epidemiology • Risk factors • Natural history • Complications

KEY POINTS

- The incidence and prevalence of Chron's disease in the Western world are continuously increasing, and are also rapidly increasing in newly industrialized countries, making Chron's disease a truly global disease.
- Cigarette smoking, low dietary fiber intake, high dietary fat intake, improved childhood hygiene, and various medications are important environmental risk factors for Chron's disease.
- Over time, the extent of Chron's disease remains mostly stable, whereas disease behavior changes over time, with more patients developing stricturing or penetrating complications.
- Risk factors for a more unfavorable clinical course of Chron's disease include younger age at diagnosis, extensive anatomic involvement, perianal disease, stricturing or penetrating behavior, deep ulcers, and prior surgical resection.

INTRODUCTION

Chron's disease (CD) is a chronic condition that in some cases can result in significant morbidity and disability. The disease course can wax and wane over time, and there is a wide spectrum of severity. It is important to understand the epidemiology, risk

S. Aniwan and S.H. Park share co-first authorship.

Disclosure Statement: Dr E.V. Loftus Jr has consulted for AbbVie, Janssen, Takeda, UCB, Amgen, Pfizer, Eli Lilly, Salix, CVS Caremark, and Mesoblast; and has received research support from AbbVie, Janssen, Takeda, UCB, Genentech, Amgen, Pfizer, Receptos, Celgene, Gilead, Seres Therapeutics, and Robarts Clinical Trials.

^a Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street, South west, Rochester, MN 55905, USA; ^b Division of Gastroenterology, Thai Red Cross Society, King Chulalongkorn Memorial Hospital, Chulalongkorn University, Rama IV Road, Bangkok, 10330, Thailand; ^c Department of Gastroenterology, Asan Medical Center, University of Ulsan College of Medicine, 88, Olympic-ro 43-gil, Songpa-gu, Seoul 05505, Korea

* Corresponding author.

E-mail address: Loftus.Edward@mayo.edu

Gastroenterol Clin N Am ■ (2017) ■-■
<http://dx.doi.org/10.1016/j.gtc.2017.05.003>

0889-8553/17/© 2017 Elsevier Inc. All rights reserved.

gastro.theclinics.com

factors, and natural history of this incurable, lifelong disease for better management of patients and allocation of societal resources. By studying the association between demographics and initial clinical features of patients with CD and subsequent natural history, we may be able to stratify patients by their risks of clinical relapse, hospitalization, and surgery. Understanding the potential environmental risk factors and natural history of CD in a given patient guides the physician when counseling the patient and selecting a treatment strategy. Better risk stratification may improve the management of CD, thereby modifying disease outcomes. In this review, updated data regarding the incidence and prevalence of CD, important environmental risk factors, natural history of the disease, and important prognostic factors are discussed.

INCIDENCE AND PREVALENCE OF CHRON'S DISEASE

Inflammatory bowel disease (IBD) is a chronic and relapsing inflammatory disorder of the intestine, categorized into 2 identified subtypes: CD and ulcerative colitis (UC). UC was recognized as a medical condition approximately 60 years earlier than CD, and thus for years was thought to be more common than CD.¹ Because CD was formally recognized in 1932 as "regional enteritis,"² the incidence of CD has increased in the Western world, including North America, Europe, Australia, and New Zealand.³ In particular, the incidence of CD has rapidly increased alongside human civilization and population growth during the last 50 years of the twentieth century.⁴ Nowadays, the incidence of CD is highest in the Western region, ranging from 10 to 30 cases per 100,000 person-years.³ Moreover, the prevalence of IBD is highest in the Western region, affecting up to 0.5% of the general population (**Fig. 1**).³ Extrapolation of recent data from a population-based study in a well-defined region in the United States suggests that there are approximately 785,000 US residents with CD and 910,000 with UC, for a total of approximately 1.6 million US residents with IBD.⁵ There may be geographic differences in CD incidence and prevalence across Western countries, as is the case in other immune-mediated diseases.⁶ For example, studies of the European Chron's and Colitis Organization's Epidemiology Committee (ECCO-EpiCom) inception cohort showed that the incidence of IBD is high in Western Europe, low in countries near the Mediterranean Sea, and varies from low to high throughout Eastern Europe.^{7,8}

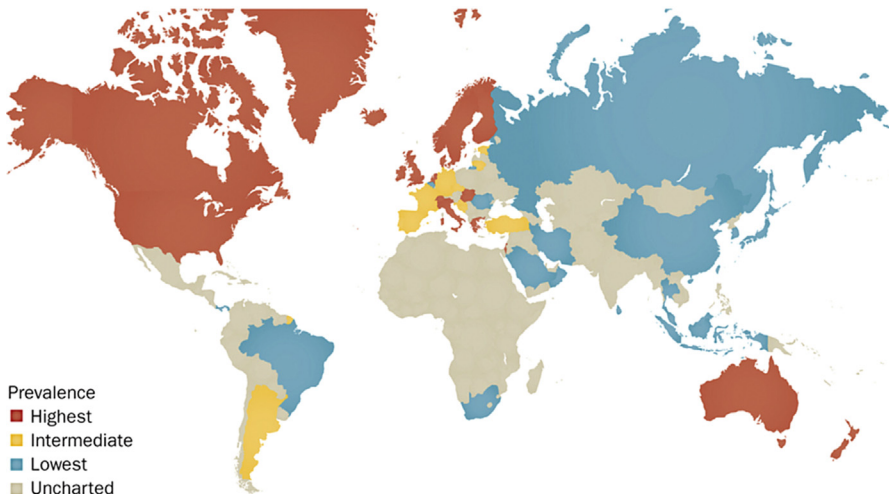


Fig. 1. The global prevalence of IBD in 2015. (From Kaplan GG. The global burden of IBD: from 2015 to 2025. *Nat Rev Gastroenterol Hepatol* 2015;12(12):722; with permission.)

Download English Version:

<https://daneshyari.com/en/article/5659003>

Download Persian Version:

<https://daneshyari.com/article/5659003>

[Daneshyari.com](https://daneshyari.com)