## REVIEW

# NEW MEDICAL APPROACHES IN CROHN'S DISEASE TREATMENT

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Abstract: Crohn's disease is a lifelong, relapsing systemic inflammatory disease of unknown etiology, mainly caused by an impaired immune response, characterized by chronic inflammation of any part of the gastrointestinal tract, with an increasing incidence worldwide. This disease is associated with multiple extraintestinal manifestations and patients frequently present persistent diarrhea, abdominal pain and weight loss. It affects people of all ages, but its onset generally occurs at a young age. Several triggers have been implicated in the etiopathology of Crohn's disease, including a dysregulated immune system, an altered intestinal microbiome, genetic susceptibility and environmental factors, but the main cause of the disease still remains an enigma. Due to its debut at a young age, in most cases, a long-term and early established treatment is undoubtedly required to prevent its progression with multiple intestinal and extraintestinal complications. Nowadays, novel biologic therapies or small-molecule drugs may deeply change the innate history of this pathology and could also decrease the rate of complications and the need for surgery. In order to establish the proper diagnosis, endoscopy with the histological evaluation of biopsy specimens represents the most reliable method, even if less invasive biomarkers are being developed. Crohn's disease is a comprehensive disease and the treatment should be adapted to each patient's underlying pathogenetic mechanism.

**Keywords:** Crohn's disease, inflammatory bowel disease, diagnosis, small molecules drugs.

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#### Introduction

Chron's Disease (CD) is a life-long, disabling inflammatory disorder that is often diagnosed at a young age and continues to increase in prevalence worldwide [1]. Patients with CD encounter periods of flares and remissions influenced by a complex pathogenesis, where inflammation maintains a decisive role [2]. Since its first description in modern medical literature as regional ileitis by Crohn, Ginzburg, and Oppenheimer in a case series presented at the annual meeting of the American Medical Association in 1932 [3], this pathology has persisted as an

unresolved problem for both gastroenterologists and immunologists [3]. Nowadays, powerful brand-new investigative techniques are gradually leading to a better understanding of the major pathophysiological processes underlying this disease, providing this way the necessary means to access new efficient therapies [4].

#### **Epidemiology**

This disease arises from a complex interplay between genetic predisposition and environmental influence. Its prevalence has continually increased over the past 50 years,