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Inflammatory bowel disease (IBD) comprises a group of chronic, immune-mediated inflammatory disorders of the gastrointestinal tract, principally Crohn's disease (CD) and ulcerative colitis (UC). These conditions are characterized by a relapsing–remitting disease course and heterogeneous clinical presentations, ranging from mild mucosal inflammation to severe, progressive disease complicated by strictures, fistulas, and systemic involvement. IBD has emerged as a global health concern, with rapidly rising incidence and prevalence in newly industrialized regions, including the Middle East, Asia, and South America.

The global burden of IBD is substantial and continues to grow. Patients often experience lifelong disease requiring continuous medical care, with significant impacts on physical health, psychological well-being, social functioning, and quality of life. From a healthcare systems perspective, IBD is associated with high rates of outpatient visits, hospitalizations, surgical interventions, and escalating healthcare costs. Despite improvements in disease control over recent decades, IBD remains a leading cause of gastrointestinal morbidity among young and working-age adults, emphasizing the need for sustained advances in care delivery and disease modification.

IBD arise from a complex interplay between genetic susceptibility, environmental exposures, the intestinal microbiome, and dysregulated immune responses. Genome-wide association studies have identified hundreds of genetic loci associated with IBD, implicating pathways involved in innate and adaptive immunity, epithelial barrier function, and host–microbial interactions. Environmental factors, including diet, antibiotic exposure, smoking, and urbanization, further modulate disease risk and phenotype, while alterations in gut microbial composition and function play a central role in disease initiation and perpetuation.

Advances in disease pathophysiology have directly influenced clinical management strategies. Traditional symptom-based approaches have given way to treat-to-target paradigms, emphasizing objective markers of inflammation and long-term outcomes rather than short-term symptom control alone. International consensus initiatives, including STRIDE-II recommendations, have established therapeutic targets such as clinical remission, biomarker normalization, endoscopic healing, and prevention of disease-related complications as central goals of IBD care. These strategies aim to alter the natural history of disease by min-

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imizing cumulative inflammatory burden and structural bowel damage. The therapeutic landscape of IBD has expanded dramatically over the past two decades. In addition to conventional therapies such as corticosteroids, immunomodulators, and aminosalicylates, the introduction of biologic agents and small-molecule therapies has revolutionized disease management. Tumor necrosis factor (TNF) antagonists, integrin inhibitors, interleukin inhibitors, Janus kinase inhibitors, and sphingosine-1-phosphate receptor modulators have provided effective treatment options across a broad spectrum of disease severity. However, therapeutic decision-making has become increasingly complex, necessitating individualized treatment selection based on disease phenotype, prognostic risk, comorbidities, safety considerations, and patient preferences. Despite these advances, primary non-response, secondary loss of response, and treatment-related adverse events remain significant clinical challenges.

IBD also represents a major cause of gastrointestinal hospitalization and surgery, particularly in patients with acute severe disease or complex complications. Hospitalized patients with IBD are at increased risk for infections, thromboembolic events, malnutrition, and corticosteroid-related morbidity, and often require coordinated multidisciplinary care team. Optimizing inpatient management through early recognition of disease severity, timely escalation of therapy, and adherence to evidence-based protocols is critical to improving short- and long-term outcomes.

As the field of IBD continues to evolve rapidly, the main goal remains the same: to improve patient outcomes through earlier diagnosis, personalized therapy, sustained disease control, and prevention of long-term complications. By combining scientific advances with real-world clinical insights, this book aims to support evidence-based, patient-centered, and multidisciplinary care for individuals living with inflammatory bowel disease.

This book is designed to serve as a comprehensive and practical resource for clinicians, trainees, and allied healthcare professionals involved in the care of patients with IBD. It integrates foundational concepts in disease biology with contemporary clinical practice, addressing the full spectrum of care—from epidemiology, diagnosis, and risk stratification to outpatient and inpatient management, advanced medical therapies, surgical considerations, and long-term monitoring. Special emphasis is placed on emerging therapies, evolving treatment paradigms, quality-of-care metrics, and the management of IBD in special populations.