

# Rome Foundation Working Team Report on Post-Infections Irritable Bowel Syndrome

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## Abstract

**Background & Aims**—The existence of post-infection irritable bowel syndrome (PI-IBS) has been substantiated by epidemiology studies conducted in diverse geographic and clinical settings. However, the available evidence has not been well summarized and there is little guidance for diagnosis and treatment of PI-IBS. The ROME Foundation has produced a working team report was to summarize the available evidence on the pathophysiology of PI-IBS and provide guidance for diagnosis and treatment, based upon findings reported in the literature and clinical experience.

**Methods**—The working team conducted an evidence-based review of publication databases for articles describing the clinical features (diagnosis), pathophysiology (intestinal sensorimotor function, microbiota, immune dysregulation, barrier dysfunction, enteroendocrine pathways and genetics), and animal models of PI-IBS. We used a Delphi-based consensus system to create guidelines for management of PI-IBS and a developed treatment algorithm based on published findings and experiences of team members.

**Results**—PI-IBS develops in about 10% of patients with infectious enteritis. Risk factors include female sex, younger age, psychological distress during or prior to acute gastroenteritis, and severity of the acute episode. The pathogenesis of PI-PBS appears to involve changes in the intestinal microbiome as well as epithelial, serotonergic, and immune system factors. However, these mechanisms are incompletely understood. There is no evidence-based effective pharmacologic strategies for treatment of PI-IBS. We provide a consensus-based treatment algorithm, based on clinical presentation and potential disease mechanisms.

**Conclusions**—Based on a systematic review of the literature and team experience, we summarize the clinical features, pathophysiology (from animal models and human studies), and progression of PI-IBS. Based on these findings, we present an algorithm for diagnosis and treatment of PI-IBS based upon team consensus. We also propose areas for investigations.

## Keywords

gastrointestinal infection; microbiome; Campylobacter; serotonin; barrier function

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