



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

- 3 Jordan RE, Adab P, Cheng KK. Covid-19: risk factors for severe disease and death. *BMJ* 2020; **368**: m1198.
- 4 Qin J, Li Y, Cai Z, et al. A metagenome-wide association study of gut microbiota in type 2 diabetes. *Nature* 2012; **490**: 55–60.
- 5 Ng SC, Hart AL, Kamm MA, Stagg AJ, Knight SC. Mechanisms of action of probiotics: recent advances. *Inflamm Bowel Dis* 2009; **15**: 300–10.

## Emotional state should not be used to differentiate IBD from IBS

We congratulate Marietta Iacucci and colleagues on their recent Rapid Review<sup>1</sup> of recommendations to triage endoscopy during COVID-19. We would like to highlight several points with regard to their algorithm for a suspected new diagnosis of inflammatory bowel disease (IBD).

The authors state that “negative emotions...can cause symptoms that mimic IBD” and that emotional state must be assessed to help rule out irritable bowel syndrome (IBS). We argue that the inclusion of “negative emotions” in this context is potentially deleterious to patient care. To the public, IBS is already a highly stigmatised condition with the misconception that the illness might not be real.<sup>2</sup> Stigmatisation arises from medical providers, friends, and family members and can perpetuate feelings of shame and helplessness, leading to delayed management and its long-term consequences.<sup>3</sup>

In the authors’ diagnostic algorithm, an abnormal emotional state, along with normal blood tests and faecal calprotectin leads to “probably IBS”. Poor emotional health is common in IBS and IBD and does not serve to discriminate between the two conditions.<sup>4</sup> Moreover, this might be exacerbated by the psychosocial shock precipitated by the COVID-19 pandemic. The dichotomised outcome of emotional state as normal versus abnormal is ambiguous and fails to capture the

complexities of psychological health; it is also pejorative and risks further stigmatisation of IBS.

Third, the step in the algorithm to “rule out IBS” after a negative stool test for infection does not follow the globally accepted diagnostic protocol for IBS. This fuels the commonly held misunderstanding among health-care professionals that IBS is a diagnosis of exclusion.<sup>4</sup> Instead, this diagnosis can be made on clinical grounds using the Rome IV criteria, which has high specificity (97%) for IBS.<sup>5</sup> Clinicians should not need to rule IBS out, but rather, should use clear evidence-based guidelines to make a diagnosis if patients meet criteria.<sup>6</sup>

We hope that the authors will consider a revision of their algorithm in figure 1 and the supporting text. We welcome a revision that eliminates the assessment of emotional state as part of the diagnostic algorithm or for differentiating IBS from IBD. We also recommend for the algorithm to be adapted to include the assessment of IBS using Rome IV criteria, which would lead to a positive diagnosis of IBS once criteria are met.

We declare no competing interests.

**Johannah Ruddy, Tiffany Taft, Keith Siau, \*Steven Bollipo**  
[steven.bollipo@newcastle.edu.au](mailto:steven.bollipo@newcastle.edu.au)

Rome Foundation, Raleigh, NC, USA (JR); Psychogastroenterology Research, Northwestern University Feinberg School of Medicine, Chicago, IL, USA (TT); Liver Unit, University Hospitals Birmingham, Birmingham, UK (KS); John Hunter Hospital, Newcastle, NSW 2305, Australia (SB); and School of Medicine & Public Health, University of Newcastle, Newcastle, NSW, Australia (SB)

- 1 Iacucci M, Cannatelli R, Labarile N, et al. Endoscopy in inflammatory bowel diseases during the COVID-19 pandemic and post-pandemic period. *Lancet Gastroenterol Hepatol* 2020; **5**: 598–606.
- 2 Taft TH, Bedell A, Naftaly J, Keefer L. Stigmatization toward irritable bowel syndrome and inflammatory bowel disease in an online cohort. *Neurogastroenterol Motil* 2017; **29**: 10.1111/nmo.12921.
- 3 Ruddy J. From pretending to truly being OK: a journey from illness to health with postinfection irritable bowel syndrome: the patient’s perspective. *Gastroenterology* 2018; **155**: 1666–69.

- 4 Spiegel BMR, Farid M, Esrailian E, Talley J, Chang L. Is irritable bowel syndrome a diagnosis of exclusion? A survey of primary care providers, gastroenterologists, and IBS experts. *Am J Gastroenterol* 2010; **105**: 848–58.
- 5 Palsson OS, Whitehead WE, van Tilburg MAL, et al. Rome IV diagnostic questionnaires and tables for investigators and clinicians. *Gastroenterology* 2016; published online Feb 13. DOI:10.1053/j.gastro.2016.02.014.
- 6 Talley NJ, Bollipo S. How can I diagnose IBS? In: Lacey B, ed. *Curbside consultation in IBS: 49 clinical questions*. Thorofare, NJ, USA: Slack, 2011.

## Authors’ reply

We appreciate the comments made by Johannah Ruddy and colleagues in response to our Rapid Review,<sup>1</sup> the focus of which, in this unprecedented period, was on how to urgently adapt endoscopy in inflammatory bowel disease (IBD) during the COVID-19 pandemic and in the post-pandemic period. As endoscopy services in general have been severely disrupted, the article highlighted priority indications in IBD for endoscopy.

Our current practice has changed dramatically with the incorporation of telemedicine, recognition of risks to patients and staff from unnecessary visits to hospital and undergoing endoscopy, redeployment of staff, and severe curtailment of endoscopy capacity. We proposed practical triaging protocols that can be administered by a range of health-care providers for prioritisation.

The differential diagnosis between IBD and irritable bowel syndrome (IBS) was not the purpose of the algorithm that Ruddy and colleagues highlight. Selecting patients for urgent colonoscopy to investigate who might have a new diagnosis of moderate to severe IBD is one of the four essential indications in IBD for endoscopy during the pandemic.<sup>1</sup>

Negative emotions such as anxiety and stress increase visceral sensitivity via the brain-gut axis, which is the crucial player in IBS symptoms.<sup>2</sup> Emotional state is an important component of triaging patients during the pandemic, with its serious effects on people’s emotional state, including stress, anxiety, and depression,<sup>3,4</sup> which