

## Letter to Editor

### Gastrointestinal Mucormycosis

Sir,

I read with a great interest an article entitled, “rare cause of lower gastrointestinal bleed” by Nasa *et al.*<sup>[1]</sup> It is an unusual and unique case with the high quality of images. I would like to congratulate all the authors for their excellent effort to present such case. However, I have a few observations in this connection. Here, authors had discussed in general about mucormycosis. As it is a case of gastrointestinal (GI) mucormycosis, I would like to add interesting information about GI mucormycosis which you may find more relevant to the readers.

Although immunocompromised patients are the primary target for GI mucormycosis, immunocompetent individuals such as intravenous drug users as well as those on deferoxamine therapy are at a risk of developing GI mucormycosis.<sup>[2]</sup> Consumption of contaminated food such as milk, bread, cereals, and herbal remedies is the source of infection.<sup>[3]</sup> The fungus has a predilection for vascular invasion leading to infarction and necrosis. Clinical manifestation of GI mucormycosis includes fever, nausea, vomiting, abdominal distension, pain, hematemesis, and hematochezia.<sup>[2]</sup> Gastric perforation had also been reported in a patient with heart-lung and heart transplantation.<sup>[4]</sup> In pediatric patients, it may mimic like necrotizing enterocolitis. Ulcers are the most common manifestation, typically large with rolled uneven edges and may mimic malignancy.<sup>[5]</sup> This fungus may also superinfect on the previously ulcerated lesion.<sup>[5]</sup> Physical findings may include the abdominal lump, sign of bowel necrosis, or perforation.<sup>[3]</sup> Intestinal perforation is the most common complication.<sup>[3]</sup> Fungal stain should be considered in any patients with ischemic GI tract lesion in immunocompromised patients, particularly ischemic lesion of the stomach.<sup>[3]</sup> The biopsy is the gold standard for diagnosis, and culture is frequently unsuccessful as organisms are saprophytic and ubiquitous in nature.<sup>[3]</sup> The authors have used posaconazole as a primary treatment along with amphotericin B. I would like to state that posaconazole is recommended for salvage therapy and used as an alternative to amphotericin B in patients refractory or intolerant to amphotericin B.<sup>[2]</sup> The disease is often too advanced for effective management. Aggressive medical and surgical therapy may improve what is usually a grave prognosis.

#### Financial support and sponsorship

Nil.

#### Conflicts of interest

There are no conflicts of interest.

Vipul D. Yagnik

Department of Surgical Gastroenterology, Ronak Endo-Laparoscopy and General Surgical Hospital, Patan, Gujarat, India

**Address for correspondence:** Dr. Vipul D. Yagnik, 77, Siddhraj Nagar, Rajmahal Road, Patan - 384 265, Gujarat, India. E-mail: vipulyagnik78@gmail.com

#### REFERENCES

1. Nasa M, Gupta M, Sud R, Lipi L. Rare cause of lower gastrointestinal bleed. *J Dig Endosc* 2017;8:27-8.
2. Walsh TJ, Roilides E, Rex JH, McGinnis MR. Mucormycosis. In: Guerrant RL, Walker DH, Weller PF, editors. *Tropic Infectious Disease: Principles, Pathogens and Practice*. E-ed., Ch. 89. Philadelphia, US: Saunders; 2011.
3. Bourke B, Hussey S. Chronic infection of the small intestine. In: Podosky DK, Camilleri M, Fitz JG, Kallo AN, Shanahan F, Wang TC, editors. *Yamada's Textbook of Gastroenterology*. West Sussex, UK: Wiley Blackwell; 2016. p. 1249-63.
4. Knoop C, Antoine M, Vachiéry JL, Depré G, Alonso-Vega C, Struelens M, *et al.* Gastric perforation due to mucormycosis after heart-lung and heart transplantation. *Transplantation* 1998;66:932-5.
5. Lamp LW. *Surgical Pathology of the Gastrointestinal System: Bacterial, Fungal, Viral, and Parasitic Infections*. 1<sup>st</sup> ed. New York: Springer; 2009.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
<b>Quick Response Code:</b> 	<b>Website:</b> <a href="http://www.jdeonline.in">www.jdeonline.in</a>
	<b>DOI:</b> 10.4103/jde.JDE_38_17

**How to cite this article:** Yagnik VD. Gastrointestinal Mucormycosis. *J Dig Endosc* 2018;9:38.

© 2018 Journal of Digestive Endoscopy | Published by Wolters Kluwer - Medknow