

# Man with Acute Abdomen

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Dear Editor,

We would like to share our input on the recently published clinical quiz “Man with Acute Abdomen” by Kyaw et al.<sup>1</sup> The authors have suggested that the pathogenesis of pneumatosis intestinalis (PI) is likely to be multifactorial with unestablished pathogenesis. One of the causes that sparked our attention is the relationship between PI and chemotherapy. We reported a similar discovery in which our patient developed PI after a course of palliative chemotherapy for metastatic gastric malignant melanoma.<sup>2</sup>

Patients with PI can present with various symptoms ranging from acute dyspepsia to acute abdomen. The presentations usually correspond to the underlying pathology, and therefore hard to predict as it mimics other surgical pathology. As opposed to the authors' case,<sup>1</sup> whereby the patient presented with lower gastrointestinal symptoms, our patient had upper gastrointestinal tract features.<sup>2</sup> The gold standard in the identification of PI includes contrast-enhanced computed tomography scan. Features suggestive on computed tomography seen as eccentric gas bubbles tracking along the inner wall of the gastrointestinal tract separating the intraluminal gas are pathognomonic for PI.<sup>3</sup> Occasionally, PI is associated with hepatic portal venous gas,

but the absence of this secondary sign does not rule out PI.

Management strategy includes identifying the etiology and managing the case accordingly. Non-operative management includes adequate hydration, intravenous antibiotic, intravenous analgesia, adequate enteral or parenteral nutrition, and bedside abdominal drain to reduce the sepsis. Operative management includes damage control surgery with stoma creation. Very rarely, bowel resection and primary anastomosis are performed, as usually these subsets of patients have limited physiological reserve and are immunocompromised secondary to chemotherapy.<sup>4</sup> A minority of cases end in mortality, especially among patients in advanced states of malignancy, as in our case.<sup>2</sup>

## REFERENCES

1. Kyaw NK, Abubakar M, Shekhda KM, Tageldeen R, Afifi W, Halliru FM, et al. Man with acute abdomen. *Oman Med J* 2023 Jan;38(1):e473.
2. Ng CY, Hayati F, Nadarajan C. Emphysematous gastritis after metastatic malignant melanoma: a radiological surprise. *BMJ Case Rep* 2020 Sep;13(9):e235174.
3. Ali AA, Johan S, Hayati F, Ng CY. Intramural gas: would it be life-threatening? *BJMS* 2020;14(3):63.
4. Kouzu K, Tsujimoto H, Hiraki S, Takahata R, Yaguchi Y, Kumano I, et al. A case of pneumatosis intestinalis during neoadjuvant chemotherapy with cisplatin and 5-fluorouracil for esophageal cancer†. *J Surg Case Rep* 2017 Nov;2017(11):rjx227.