

CLINICAL IMAGE

A man with an alcoholic-related duodenal perforation after losing his job due to the SARS-COV-2 pandemic

Dana Mahdi¹  | Mohamed Adam Ali²

¹King's College London Medical School, London, England

²University College London, London, England

Correspondence

Dana Mahdi, King's College London Medical School, 1 Robinwood Place, London, SW15 3SE, England.
Email: dana.mahdi@kcl.ac.uk

Funding information

No funding for this report

Abstract

Pneumoperitoneum is a medical emergency, diagnosed by subdiaphragmatic free air upon X-ray. The underlying cause, in this case a perforated duodenal ulcer from increased alcohol intake, must also be identified and treated. Public health crisis can impact physical health to varying degrees across socioeconomic groups.

KEYWORDS

medical emergency, peptic ulcerative disease, pneumoperitoneum, public health

1 | CASE DESCRIPTION

A 37-year-old male patient attended the emergency department with a 2-h history of sudden-onset severe upper-abdominal pain, worsening with movement. He had no medical history of note. His alcohol intake had increased significantly in the preceding two months, since losing his job due to impacts of the SARS-COV-2 pandemic on his workplace. On examination, there was epigastric rebound tenderness. He was normotensive, with vital signs and laboratory investigations within normal limits.

An erect plain radiograph of the chest showed subdiaphragmatic free air. Computed tomography of the chest and abdomen with intravenous contrast confirmed a mural defect in part 1 of the duodenum (Figure 1).

Emergency laparoscopic patch repair was undertaken, and he made an uneventful recovery, with referral to alcohol dependence services. Risk factors for peptic ulcerative disease include helicobacter pylori infection (48%),¹ NSAID use (24%),¹ smoking (23%),¹ and alcohol excess (43%),² which was likely an important contributing factor in this patient.

The index case illustrates the real-life physical health illnesses that can occur as an indirect consequence of

public health crises, and how these can starker health disparities in different socioeconomic groups. Additionally, this case highlights the importance of attaining a careful social history, to narrow the differential diagnoses.

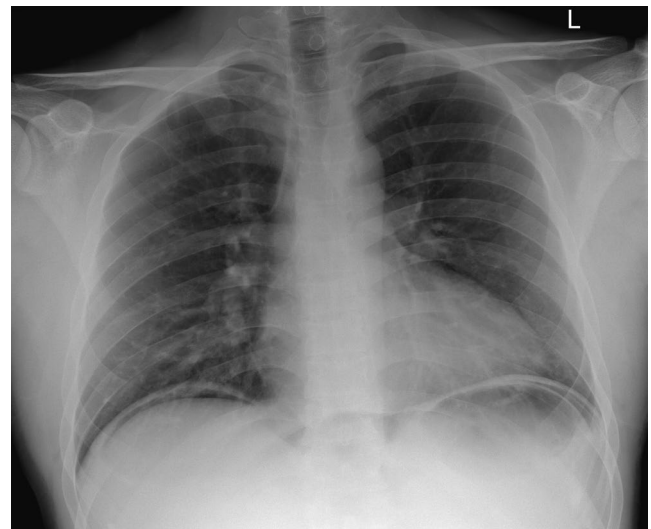


FIGURE 1 Erect plain chest radiography demonstrated air under the diaphragms bilaterally, a radiologic finding indicative of pneumoperitoneum

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

ACKNOWLEDGEMENTS

During submission, it was confirmed that patient consent has been signed and collected in accordance with the journal's patient consent policy.

CONFLICT OF INTEREST

No competing interests to declare.

AUTHOR CONTRIBUTIONS

DM obtained the relevant radiologic images and produced the manuscript. MAA made critical revisions of, and approved, the final manuscript.

ETHICAL APPROVAL

The authors declare that they have no conflicts of interest and no funding was received for this research. The authors declare there are no competing interests. No patient identifying data has been released in the article. No further acknowledgements to be made.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

ORCID

Dana Mahdi  <https://orcid.org/0000-0001-6201-756X>

REFERENCES

1. Kurata JH, Nogawa AN. Meta-analysis of risk factors for peptic ulcer: nonsteroidal anti-inflammatory drugs, helicobacter pylori, and smoking. *J Clin Gastroenterol.* 1997;24(1):2-17.
2. Strate LL, Singh P, Boylan MR, Piawah S, Cao Y, Chan AT. A prospective study of alcohol consumption and smoking and the risk of major gastrointestinal bleeding in men. *PLoS One.* 2016;11(11):e0165278.

How to cite this article: Mahdi D, Ali MA. A man with an alcoholic-related duodenal perforation after losing his job due to the SARS-COV-2 pandemic. *Clin Case Rep.* 2021;9:e04896. <https://doi.org/10.1002/ccr3.4896>