

CASE IMAGE

Rectus sheath hematoma in COVID-19 patient: The importance of abdominal pain in the course of COVID-19

Ali Javidi¹  | Hamid Reza Niazkar²  | Jelveh Jalili³  | Farhad Homapour⁴ 

¹Department of Medicine, Faculty of General Surgery, Gonabad University of Medical Sciences, Gonabad, Iran

²Breast Diseases Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

³Department of Medicine, Faculty of Obstetrics and Gynecology, Gonabad University of Medical Sciences, Gonabad, Iran

⁴Department of Surgery, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

Correspondence

Hamid Reza Niazkar, Breast Diseases Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.
Email: hnm185@hotmail.com

Funding information

None

Abstract

We report herein a case of a 58-year-old woman with COVID-19. During the hospitalization, the patient complained of acute abdominal pain, and abdominal CT revealed the rectus sheath hematoma (RSH). Since corticosteroids and anti-coagulation are commonly administered in COVID-19 patients, physicians should consider RSH as a possible diagnosis for acute abdominal pain.

KEYWORDS

abdominal pain, coronavirus disease 2019, COVID-19, rectus sheath hematoma

1 | CASE DESCRIPTION

A 58-year-old obese woman was admitted to our hospital complaining of cough and sore throat with an unremarkable past medical history and no history of trivial trauma. She was tested positive for COVID-19, and she was receiving corticosteroids and anti-coagulation (Heparin 5000 unit/SC/TDS) along with remdesivir. On the third day of hospitalization, the patient developed abdominal pain, and the abdominal CT confirmed left rectus sheath hematoma (RSH) (Figure 1). Due to the rapid hematoma expansion (over four cm of expansion in 4 h) and unstable hemodynamics (tachycardia and hypotension), she was treated with immediate angioembolization of the inferior epigastric artery. The patient

was discharged 6 days later in good condition, and she was completely free of symptoms during the 3 months of follow-up.

Rectus sheath hematoma mostly happens in the setting of blunt abdominal trauma or anti-coagulation therapy. In addition, various predisposing factors such as hypertension, obesity, and corticosteroid administration have been identified in association with RSH.¹ Furthermore, corticosteroids and anti-coagulation are commonly administered in COVID-19 patients.² Also, coughing in COVID-19 patients may exert intense muscle contraction, leading to RSH. In this regard, although abdominal pain may be experienced during the COVID-19 disease, physicians should consider RSH as a possible diagnosis in suspected patients.

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.

© 2022 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

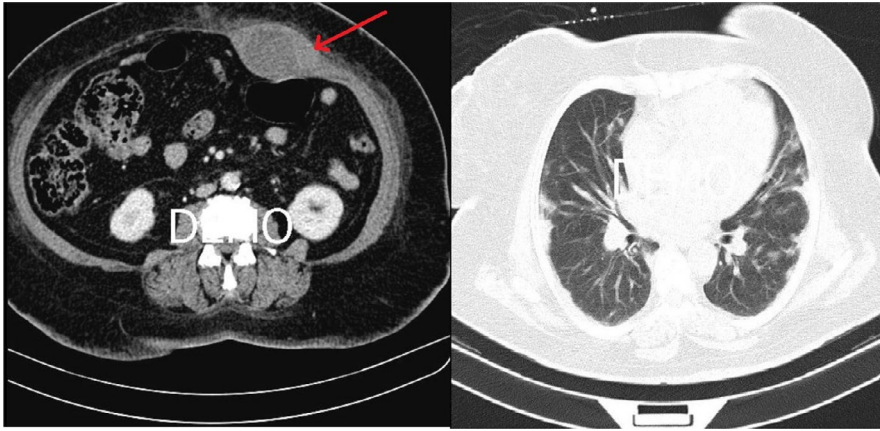


FIGURE 1 Abdominal (left) and lung (right) CT of the patient. The RSH is shown with an arrow

ACKNOWLEDGEMENTS

None.

CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTION

AJ, HRN, and FH conceptualized the data. AJ, JJ, and HRN curated the data. FH and HRN wrote the original draft. AJ and JJ edited the draft.

ETHICAL APPROVAL

Written informed consent was obtained from the patients prior to the publication.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

DATA AVAILABILITY STATEMENT

None.

ORCID

Ali Javidi  <https://orcid.org/0000-0002-2694-4961>

Hamid Reza Niazkar  <https://orcid.org/0000-0002-6143-9979>

Jelveh Jalili  <https://orcid.org/0000-0002-9292-4985>

Farhad Homapour  <https://orcid.org/0000-0002-8047-3945>

REFERENCES

1. Hatjipetrou A, Anyfantakis D, Kastanakis M. Rectus sheath hematoma: a review of the literature. *Int J Surg*. 2015;13:267-271.
2. Coppock D, Baram M, Chang AM, et al. COVID-19 treatment combinations and associations with mortality in a large multi-site healthcare system. *PLoS One*. 2021;16(6):e0252591.

How to cite this article: Javidi A, Niazkar HR, Jalili J, Homapour F. Rectus sheath hematoma in COVID-19 patient: The importance of abdominal pain in the course of COVID-19. *Clin Case Rep*. 2022;10:e05768. doi:[10.1002/ccr3.5768](https://doi.org/10.1002/ccr3.5768)