

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://Elsevier.com/locate/radcr>

Diagnostic Imaging

Spontaneous rectus sheath hematoma: The utility of CT angiography

Antonio Pierro MD^{a,*}, Savino Cilla PhD^b, Pietro Modugno MD^c, Enrico Maria Centritto MD^c, Carlo Maria De Filippo MD^c, Giuseppina Sallustio MD^a

^a Radiology Department, Fondazione di Ricerca e Cura “Giovanni Paolo II”, Università Cattolica del Sacro Cuore, Campobasso, Italy

^b Medical Physics Unit, Fondazione di Ricerca e Cura “Giovanni Paolo II”, Università Cattolica del Sacro Cuore, Campobasso, Italy

^c Department Cardiovascular Disease, Fondazione di Ricerca e Cura “Giovanni Paolo II”, Università Cattolica del Sacro Cuore, Campobasso, Italy

ARTICLE INFO

Article history:

Received 8 December 2017

Accepted 4 January 2018

Available online 3 February 2018

Keywords:

Rectus sheath hematoma

Acute abdomen

Arterial embolization

CT angiography

Active bleeding

ABSTRACT

We described the utility of computed tomography (CT) angiography in detection of bleeding vessels for a rapid percutaneous arterial embolization of the spontaneous rectus sheath hematoma. A 70-year-old woman comes to our attention with acute abdominal pain and a low hemoglobin level. An unenhanced CT was performed demonstrating a large rectus sheath hematoma. A conservative management was initially established. Despite this therapy, the abdominal pain increased together with a further decrease of hemoglobin values. A CT angiography was then performed, demonstrating an active bleeding within the hematoma and addressing the patient to a rapid percutaneous arterial embolization.

© 2018 the Authors. Published by Elsevier Inc. under copyright license from the University of Washington. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

Rectus sheath hematoma (RSH) is a rare clinical condition caused by bleeding into the rectus abdominis muscles due to the rupture of superior or inferior epigastric artery or caused by direct muscular tear [1]. The frequency of this occurrence is increasing with the use of anticoagulant therapy [2], and it can generate a misdiagnosis as it may mimic many acute ab-

dominal conditions [3,4]. The most common presenting features are acute abdominal pain, palpable abdominal wall mass and decrease in hemoglobin levels [1,3]. Appropriate and early diagnosis is important to exclude a false acute abdomen and to avoid unnecessary exploratory surgery. Computed tomography (CT) is the main diagnostic modality; in particular, CT angiography can demonstrate the existence of the active bleeding within the hematoma [5,6]. In most cases, the RSH management is conservative [3]. However, an invasive

Competing Interest: The authors declare that they have no conflict of interest. The authors declare no association with any individual, company, or organization having a vested interest in the subject matter or products mentioned in this article.

* Corresponding author.

E-mail address: apierrojonico@libero.it (A. Pierro).

<https://doi.org/10.1016/j.radcr.2018.01.016>

1930-0433/© 2018 the Authors. Published by Elsevier Inc. under copyright license from the University of Washington. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

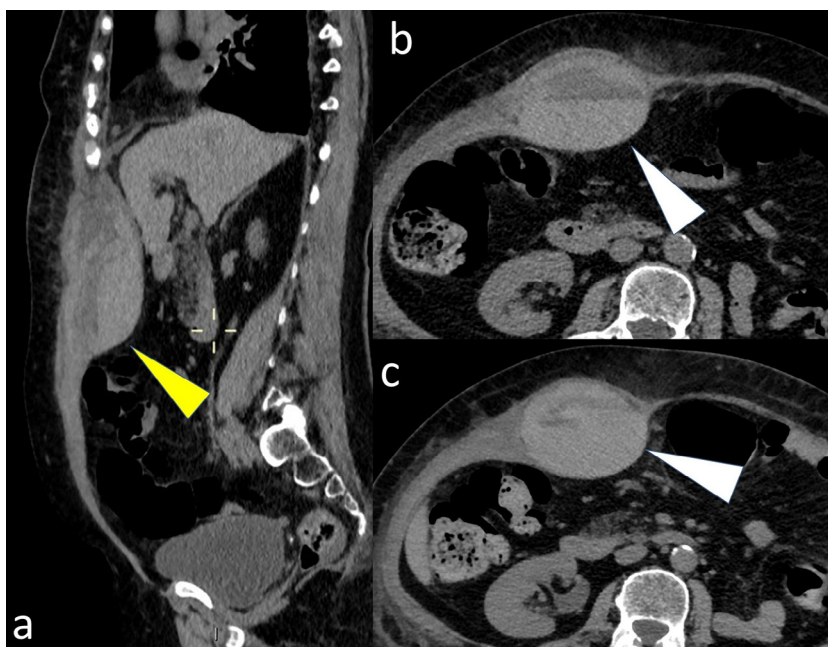


Fig. 1 – Unenhanced computed tomography (CT) at the level of the upper right abdomen (A) shows, in sagittal plane, a large rectus sheath hematoma (yellow arrowhead) with hematocrit effect (white arrowhead in axial images B and C).

intervention should be always considered when clinical severity criteria are present, such as a neurologic deficit and hemodynamic instability or persistent abdominal pain [7].

We described a case of a 70-year-old woman with a large RSH, in which the CT angiography examination proved to be decisive for urgent embolization.

Case report

A 70-year-old woman, subjected to an anticoagulant therapy after a recent aortic valve repair, came to our observation manifesting an acute abdomen, anemia, palpable abdominal mass, and abdominal pain localized in the right subcostal region. Initially, the patient underwent a liver sonography on suspicion of an acute cholecystitis, but the examination did not confirm this clinical suspicion. In addition, the patient

denied any recent traumatic event. Because of the hemoglobin level reduction at 9.5 g/dL together with the presence of an apparent peritoneal irritation, an urgent unenhanced CT was done. The CT examination revealed a $12 \times 9 \times 4$ -cm right RSH with a mixed pattern, with fluid-fluid levels due to hemorrhagic sedimentation (hematocrit effect) (Fig. 1). The choice for an unenhanced CT examination was considered because of the high serum creatinine level and the condition of solitary kidney for prior nephrectomy. Then a conservative management with analgesia, intravenous hydration, stopping of anticoagulants, and transfusion has been established. Despite this therapy, in the subsequent 2 days, the abdominal pain worsened and the hemoglobin level continued to decrease (8 g/dL). The clinical worsening justified the appeal to an urgent CT angiography, demonstrating an active arterial extravasation (small jet) within the hematoma (Fig. 2), originating from a media branch of right superior epigastric artery (Fig. 3).

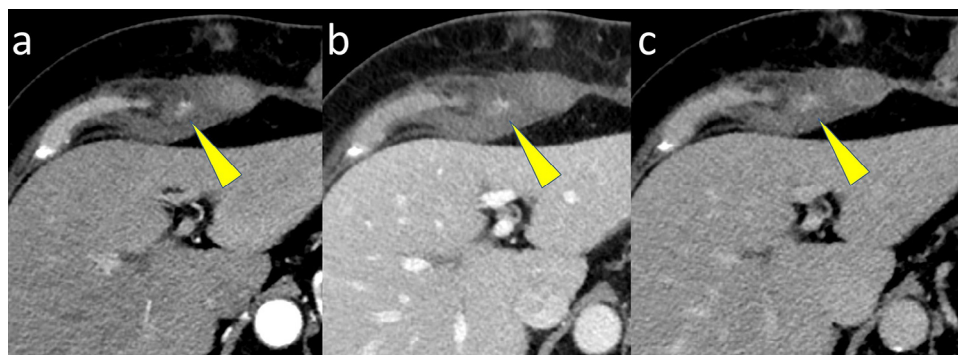


Fig. 2 – Axial images of computed tomography (CT) angiography obtained in the arterial (A), venous (B), and late (C) phases show active bleeding (yellow arrowhead) in superior region of hematoma.

Download English Version:

<https://daneshyari.com/en/article/8825079>

Download Persian Version:

<https://daneshyari.com/article/8825079>

[Daneshyari.com](https://daneshyari.com)