

Case Report

Inferior Vena Cava Aneurysm

Haddad R^{1*} and Ristow AV²

¹Department of Thoracic Surgery, Copa Star Hospital, Pontifical Catholic University of Rio de Janeiro, National Academy of Medicine, Brazil

²Department of Vascular Surgery, Copa Star Hospital, Pontifical Catholic University of Rio de Janeiro, National Academy of Medicine, Brazil

Abstract

A routine postoperative chest-CT scan detected an incidental asymptomatic case of an Inferior Vena Cava (IVC) aneurysm. Because of the uncommon incidence of this condition, we share the images to alert about this vascular abnormality.

Keywords: venous aneurysm, inferior vena cava, thoracic radiology

Introduction

Inferior vena cava aneurysms are rare, and less than 74 cases were reported in the literature [1-4]. We present images from a recently diagnosed case. This report will serve to alert the health professionals about the occurrence of this vascular anomaly.

Case Presentation

This is the case of a 67 years-old Caucasian lady, submitted to a robotic left upper lobectomy and lymphadenectomy six years before to treat a 10 mm atypical carcinoid (neuroendocrine carcinoma grade II - T1a N0 M0). She had an annual routine computerized tomography (CT-scan) of the chest in Feb 2022 and an asymptomatic Inferior Vena Cava (IVC) aneurysm, with 4.24 cm in its largest diameter, between the suprahepatic veins and the right atrium, classified as type I by Gradman and Steinberg [5] was detected (Figure 1 A-C). In a specific consultation about this finding, she reported no symptoms related to this finding and had no signs of relapse of the primary lesion. Revisions of previous CT scans showed that a smaller enlargement of the IVC was already present in 2020 (3.8 cm). We started prophylactic anticoagulation with rivaroxaban, 10 mg/day, to prevent the formation of thrombi inside the aneurysm. Regular semestral CT scans focused on detecting possible lesion growth or modifications are mandatory.

Complementary Considerations

IVC aneurysms are rare, with a few cases published in the literature. They are classified into four types (Table 1), and this case is a type 1 aneurysm. We recommend observation and prophylactic anticoagulation for this patient.

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***Corresponding author:** Rui Haddad, Department of Thoracic Surgeon, Copa Star Hospital, Pontifical Catholic University of Rio de Janeiro, National Academy of Medicine, Rua Barão de Lucena 48, Suite 03-22260-020, Rio de Janeiro-RJ, Brazil, Tel: +55-21-986163322; E-mail: ruihaddad@mac.com

Conflicts of interest

The authors have no conflicts of interest.

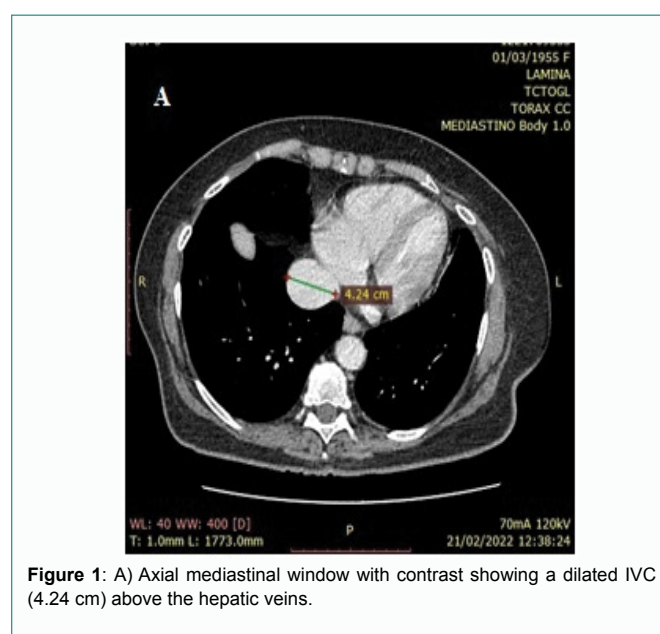


Figure 1: A) Axial mediastinal window with contrast showing a dilated IVC (4.24 cm) above the hepatic veins.

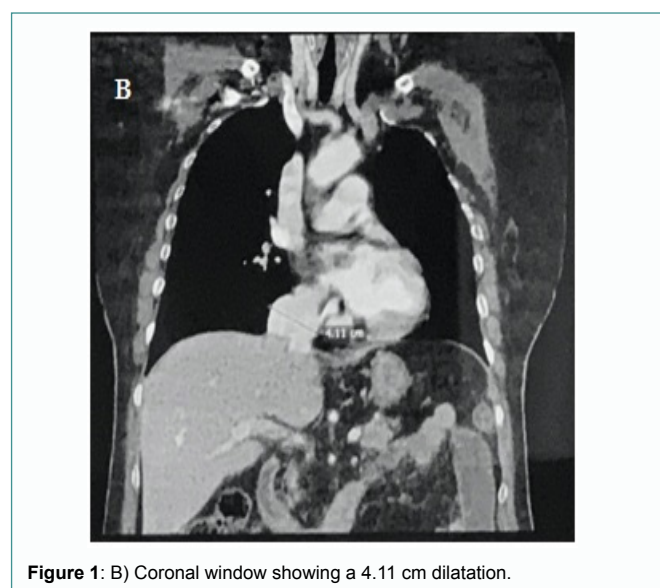
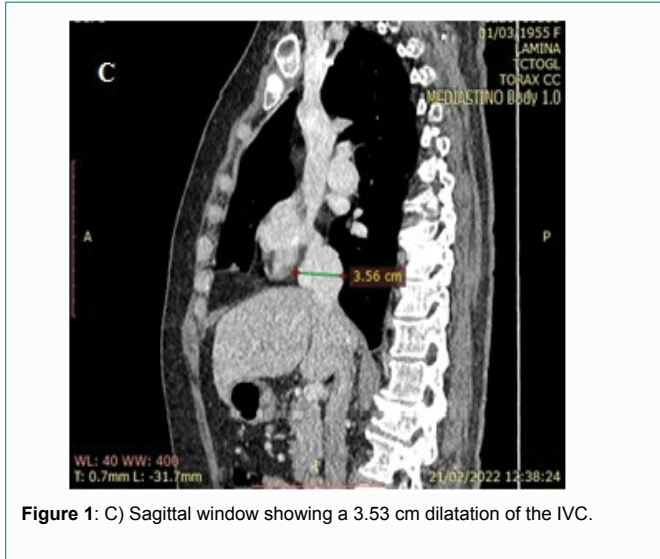


Figure 1: B) Coronal window showing a 4.11 cm dilatation.

Table 1: Classification of IVC aneurysms [5].

Type	Description
I	Aneurysms of the suprahepatic IVC without venous obstruction
II	Aneurysms associated with interruption of the IVC above or below the hepatic veins
III	Aneurysms confined to the infrarenal IVC without associated venous anomaly
IV	Miscellaneous

**Figure 1:** C) Sagittal window showing a 3.53 cm dilatation of the IVC.

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