A 46-year-old man was admitted for severe back pain over the interscapular area radiating anteriorly along the ribs. Symptoms started intermittently 2 months previously, but became severe and persistent over the past 3 days. The patient was a former sailor and a heavy smoker, with no relevant personal or family history of cardiovascular disease. At physical examination, a pulsatile left paravertebral mass could be seen and palpated close to the spine (online-only Data Supplement Movie I). A high-pitched decrescendo diastolic murmur could be heard along the left sternal border. He was normotensive and tachycardic, with no signs of pulmonary or systemic congestion. The ECG showed sinus tachycardia (115 beats per minute) and complete right bundle-branch block with secondary ST-T changes (Figure 1). Chest x-ray film showed a slightly increased cardiothoracic index, with a significant bulge at the upper half of the left cardiac border (Figure 2). Transthoracic echocardiography revealed moderate-severe aortic regurgitation (online-only Data Supplement Movie II) through a thickened tricuspid aortic valve. The aortic root was not significantly enlarged. Transesophageal echocardiography confirmed the severity of aortic regurgitation (online-only Data Supplement Movie III) and showed a giant descending thoracic aortic aneurysm (diameter of 8.7 cm), partly thrombosed (Figure 3 and online-only Data Supplement Movie IV). Thoracic computed tomography revealed a

Figure 1. ECG reveals sinus tachycardia (115 beats per minute), complete right bundle-branch block, and secondary ST-T changes.

From the “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania (B.A.P., O.S., C.C.B., M.R., I.L., C.G.); and “Prof Dr C C Iliescu” Institute of Cardiovascular Diseases, Bucharest, Romania (B.A.P., O.S., C.C.B., M.R., C.G.).

The online-only Data Supplement is available at http://circulation.ahajournals.org/lookup/suppl/doi:10.1161/CIRCULATIONAHA.112.127522/-/DC1.

Correspondence to Bogdan A. Popescu, MD, PhD, “Carol Davila” University of Medicine and Pharmacy–Euroecolab, “Prof Dr C C Iliescu” Institute of Cardiovascular Diseases, Sos Fundeni 258, Sector 2, 022328 Bucharest, Romania. E-mail bogdan.a.popescu@gmail.com

(Circulation. 2012;126:e344-e347.)

© 2012 American Heart Association, Inc.

Circulation is available at http://circ.ahajournals.org

DOI: 10.1161/CIRCULATIONAHA.112.127522
small aneurysm at the distal part of the ascending aorta and confirmed the large descending aortic aneurysm (Figure 4), which was eroding the spine and adjacent ribs protruding toward the skin (Figures 5 and 6). Magnetic resonance imaging allowed better delineation of the local aneurysm extension (Figure 7). Treponema pallidum hemagglutination assay was positive, suggesting a syphilitic nature of aortic involvement. The patient refused any invasive treatment and died shortly after discharge.

This report describes the rare case of a double aortic aneurysm of luetic etiology and the complementary role of several imaging techniques for the detailed description of disease extension.\(^1\) The descending aorta aneurysm was large enough to cause spine and ribs erosion and to become visible at the physical examination as a paravertebral pulsatile mass, suggesting the diagnosis of a large aortic aneurysm already at the clinical examination.

**Disclosures**

None.

**Reference**


**Key Words:** aneurysm / aorta / echocardiography / thoracic aortic aneurysm

---

**Figure 2.** Postero-anterior chest x-ray film depicts a slightly increased cardiothoracic index and mediastinal superior right, superior, and middle left arch enlargement (arrows) with a biconvex bulging left-side border.

**Figure 3.** Transesophageal echocardiography shows a large descending thoracic aortic aneurysm with a diameter of \(\approx 8.7\) cm. The aneurysm is partially thrombosed (arrows).
Figure 4. Computed tomography angiography with sagittal-oblique view reformation at the aortic thoracic level reveals double saccular aortic aneurysms, one located at the anterosuperior portion of the ascending aorta and the second with a posterior topography at the descending thoracic aorta, both partially thrombosed (arrows).

Figure 5. Computed tomography angiography, axial view at the level of the pulmonary trunk depicting large partially thrombosed descending aortic aneurysm, extending to the left costovertebral space, and involving the left epidural space (arrow) and the paraspinial muscles.
Figure 6. Computed tomography angiography with sagittal-oblique 3D view reformatation at the aortic thoracic level revealing double saccular aortic aneurysms (arrows). In this type of reconstruction only the circulated portion of the aneurysms is seen.

Figure 7. Magnetic resonance imaging T1-weighted after gadopentetic acid intravenous injection, axial view at the level of the pulmonary trunk showing large descending aortic aneurysm (arrow), partially thrombosed, extending at the left costovertebral space and involving the left epidural space and the paraspinal muscles (arrowheads). Magnetic resonance imaging shows a better delineation of the extensions vs the computed tomography angiography.
A Paravertebral Pulsatile Mass
Bogdan A. Popescu, Oana Savu, Carmen C. Beladan, Monica Rosca, Ioana Lupescu and Carmen Ginghina

Circulation. 2012;126:e344-e347
doi: 10.1161/CIRCULATIONAHA.112.127522
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2012 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/126/24/e344

Data Supplement (unedited) at:
http://circ.ahajournals.org/content/suppl/2015/03/02/126.24.e344.DC1

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/