A 47-year-old man presented to his local accident and emergency department with an acutely ischemic left leg. Apart from being a smoker of 30 years, he had no relevant medical or social history. Clinical examination was consistent with femoral embolism with no obvious underlying cause. Examination of the rest of his cardiovascular and respiratory systems was unremarkable. His full blood count, urea, electrolytes, and clotting screen were normal, and ECG showed sinus rhythm with no acute changes.

Intravenous heparin infusion was started, and an urgent embolectomy via a popliteal approach was performed with 4-compartment fasciotomies. On-table completion angiography showed restoration of flow to the foot. The retrieved tissue was sent for histological analysis.

The patient was then transferred to a vascular unit for further investigations. A transesophageal echocardiogram showed a structurally normal heart, but 2 masses were visible in the descending thoracic aorta (Figure 1 and Movie I in the online-only Data Supplement). A computed tomographic angiogram showed a nonenhancing filling defect in the descending thoracic aorta (Figure 2). Magnetic resonance imaging was performed by a specialist cardiovascular imaging unit to further delineate the mass and revealed a transluminal lesion, extending from 60 mm distal to the left subclavian artery to $45$ mm above the level of the diaphragm with no surrounding infiltration or other lesions (Figure 3). The appearance suggested an aortic tumor of the descending aorta. Histology of the tissue retrieved at histology was suggestive of myxoma.

Surgical resection of the descending thoracic aorta was performed by a joint cardiac and vascular surgical team via a left lateral thoracotomy with left heart bypass. The supradiaphragmatic descending aorta was isolated and cross-clamped below the tumor. Left atrial to left femoral bypass...
was commenced. The aorta was mobilized and clamped proximally just distal to the origin of the left subclavian artery. The involved segment of aorta was excised, and an 18 mm-Dacron interposition graft was sutured in place (Figures 4 through 6). The patient remained stable throughout surgery and made an uneventful postoperative recovery in the intensive care unit. He was transferred to the ward on day 4 and discharged home on day 9.

Histology of the surgical specimen confirmed a high-grade undifferentiated sarcoma of the aorta rather than myxoma (Figure 7). The aortic wall was otherwise normal. The patient had 5 cycles of adjuvant chemotherapy, and remains well and tumor free 18 months after completion of treatment.

Although acute limb ischemia is not uncommon, primary aortic tumor as a source of emboli is rarely seen. The prognosis for most primary aortic tumors is poor, and may be improved by prompt diagnosis and treatment. This case highlights the importance of thorough investigation for an underlying cause in patients presenting with acute lower limb ischemia.

Disclosures

None.
Figure 7. Histological specimen of the aortic tumor showing a tunica intima-based tumor composed of atypical round and spindle-shaped cells set within a myxofibrous stroma. The tumor appears to be demarcated by the tunica media, which is not infiltrated by tumor. Left, Magnification ×4; right, ×40.
Aortic Tumor Presenting as Acute Lower Limb Ischemia
Natalia Barry, Janice Tsui, Jonathan Dick, Daryll Baker and Sadasivam Selvakumar

Circulation. 2011;123:1785-1787
doi: 10.1161/CIRCULATIONAHA.110.985689
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2011 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/123/16/1785

Data Supplement (unedited) at:
http://circ.ahajournals.org/content/suppl/2011/04/07/123.16.1785.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/