Aortic intramural hematoma with dissection in aortic medial degeneration
Jan Menke, Christina Unterberg-Buchwald, Inga-Marie Schaefer and Andras Kertesz
Vasc Med 2011 16: 407 originally published online 15 August 2011
DOI: 10.1177/1358863X11417661

The online version of this article can be found at:
http://vmj.sagepub.com/content/16/5/407

Published by:
SAGE
http://www.sagepublications.com

On behalf of:
Society for Vascular Medicine

Additional services and information for Vascular Medicine can be found at:

Email Alerts: http://vmj.sagepub.com/cgi/alerts
Subscriptions: http://vmj.sagepub.com/subscriptions
Reprints: http://www.sagepub.com/journalsReprints.nav
Permissions: http://www.sagepub.com/journalsPermissions.nav
Citations: http://vmj.sagepub.com/content/16/5/407.refs.html

>> Version of Record - Oct 14, 2011
OnlineFirst Version of Record - Aug 15, 2011
What is This?
A 67-year-old man presented to the hospital after acute onset of chest pain. Echocardiography showed a pericardial effusion and an aortic dissection was suspected. Contrast-enhanced computed tomodigraphic angiography depicted aneurysmal dilation of the ascending aorta measuring 5.5 cm in diameter. Furthermore, it revealed an intimal tear with outflow of contrast medium into the dissected anterior wall of the upper ascending aorta (Panel A1; arrow). This tear extended into an anterior intramural hematoma, reaching from the aortic arch to the aortic root (Panel A2; arrow). Pericardial effusion was also present. The arch vessels were not involved. Catheter angiography ruled out coronary artery disease and confirmed that the coronary arteries were neither dissected nor compressed by the intramural hematoma. The imaging findings were confirmed intraoperatively, including the intimal tear of the aortic dissection. On visual inspection, the aortic valve and orifices of the coronary arteries were normal. The supracoronary ascending aorta and inferior wall of the aortic arch were replaced by a vascular prosthesis. Histology of the resected aortic wall revealed a medial degeneration.
adjacent accumulation of extracellular proteoglycans (short arrows) with fragmentation of some elastic fibers (long arrows). The patient fully recovered without significant disability.

These images of an aortic dissection demonstrate that, on the basis of a pre-existing aortic wall disease, an intramural hematoma may be closely associated with an intimal tear.1

Funding
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Reference

Panel B
degeneration (previously termed ‘cystic medial necrosis’).1 Tissue staining with Alcian-blue (Panel B) showed a hematoma within the dissected medial layer (arrowheads) and...