

## Images in vascular medicine

Dittmar Böckler, Stefan Ockert, Hardy Schumacher, Jens-Rainer Allenberg

## ▶ To cite this version:

Dittmar Böckler, Stefan Ockert, Hardy Schumacher, Jens-Rainer Allenberg. Images in vascular medicine. Vascular Medicine, 2006, 11 (2), pp.133-134. 10.1191/1358863x06vm652xx . hal-00572137

HAL Id: hal-00572137

https://hal.science/hal-00572137

Submitted on 1 Mar 2011

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

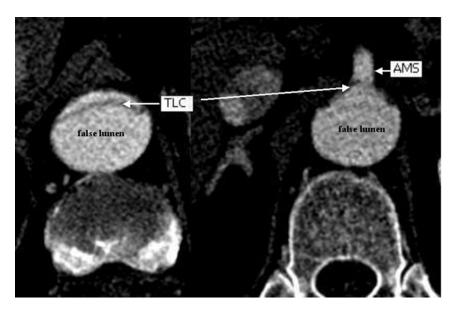
## Images in vascular medicine

Undiagnosed fatal mesenteric ischemia in acute type B aortic dissection

Dittmar Böckler, Stefan Ockert, Hardy Schumacher and Jens-Rainer Allenberg



Panel A



Panel B

Department of Vascular and Endovascular Surgery, University of Heidelberg, Heidelberg, Germany

Address for correspondence: Dittmar Böckler, Department of Vascular and Endovascular Surgery, University of Heidelberg, Im Neuenheimer Feld 110, 69120 Heidelberg, Germany. Tel: +49 6221 566249; Fax: +49 6221 566423; E-mail: dittmar\_boeckler@med.uni-heidelberg.de

A 48-year-old man with a 2-day history of acute onset of upper back discomfort was admitted to the hospital. Physical examination was unremarkable and a chest radiograph was normal. A computed tomographic (CT) scan confirmed acute aortic dissection type B without ischemic complications (Panel A, white arrows show dissection membrane). The patient was treated with aggressive blood-pressure control in the intensive care unit. Measurement of serum lactate, GOT

(glutamat-oxalat-transaminase), GPT (glutamat-pyruvat-transaminase), LDH (laktatdehydrogenase), creatinine and urea confirmed highly elevated levels 20 hours later. The patient did not have abdominal pain. A CT scan was repeated (Panel B), suggesting hemodynamic impairment of the superior mesenteric artery (SMA) originating from the collapsed true lumen (TLC; arrows) due to low contrast enhancement. Selective angiography suggested compromised perfusion of the SMA due to delayed contrast inflow (Panel C, movie clip). The

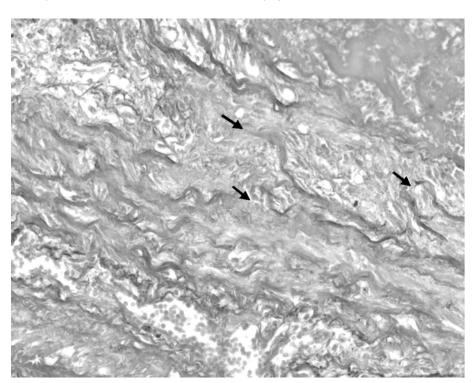


Panel C (and movie)

patient underwent endovascular repair. An acute abdomen developed 12 hours after endograft implantation. At immediate surgery the colon was found to be ischemic and a bowel resection was performed (Panel D). The patient died of multiorgan failure on day 3 after surgery. Medial dissection of the aortic wall with fragmentation of elastic lamellae, suspicious for connective tissue disorder, is seen on histological sections (van Gieson-elastic stain,  $100\times$ ) (Panel E, arrows indicate tears of elastic fibers). Mesenteric ischemia remains a very difficult diagnostic and therapeutic problem. The role of endovascular treatment of acute asymptomatic type B dissection in the early onset needs to be evaluated in the future.



Panel D



Panel E

'Images in vascular medicine' is a regular feature of *Vascular Medicine*. Readers may submit original, unpublished images related to clinical vascular medicine to: Mark A Creager, Editor in Chief, *Vascular Medicine*, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115, USA.