



HAL
open science

Marfan syndrome – aortic dissection type A, visualized by computed tomography angiography

Jerzy Wojciuk, Graham M Hoadley, Michael J Brack

► **To cite this version:**

Jerzy Wojciuk, Graham M Hoadley, Michael J Brack. Marfan syndrome – aortic dissection type A, visualized by computed tomography angiography. *Vascular Medicine*, 2008, 13 (1), pp.87-88. <10.1177/1358863X07086234>. <hal-00571376>

HAL Id: hal-00571376

<https://hal.science/hal-00571376v1>

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.

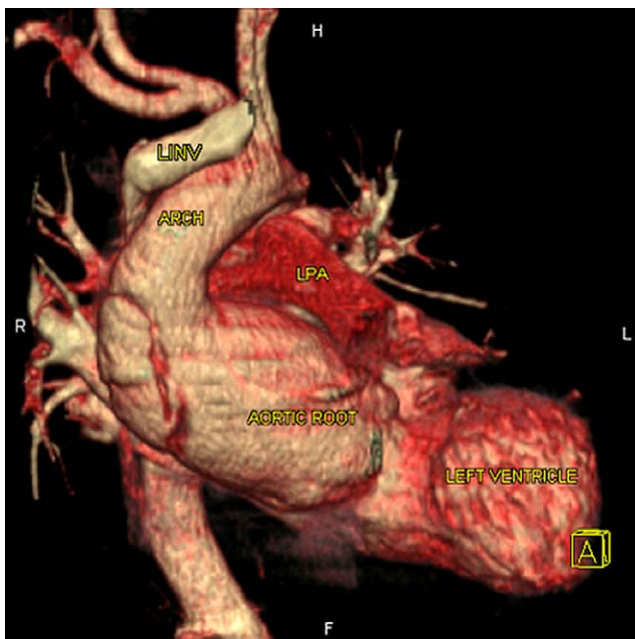


HAL Authorization

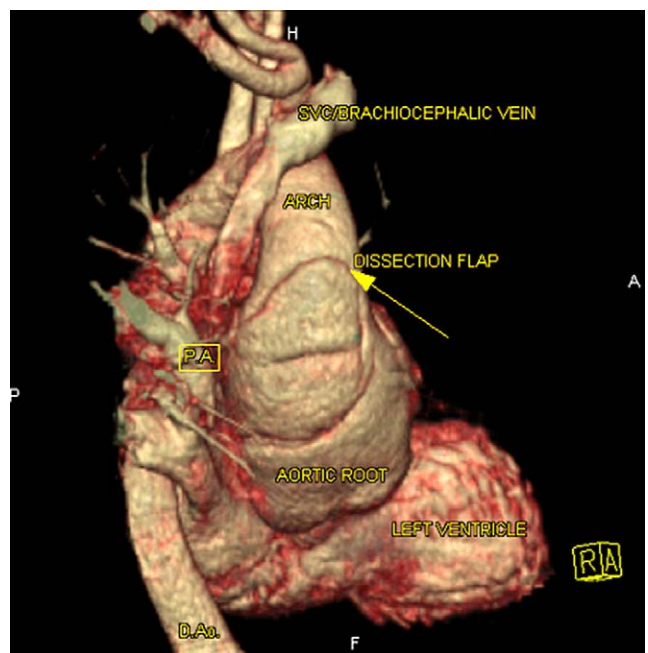
Images in vascular medicine

Marfan syndrome – aortic dissection type A, visualized by computed tomography angiography

Jerzy Wojciuk¹, Graham M Hoadley² and Michael J Brack¹



Panel A



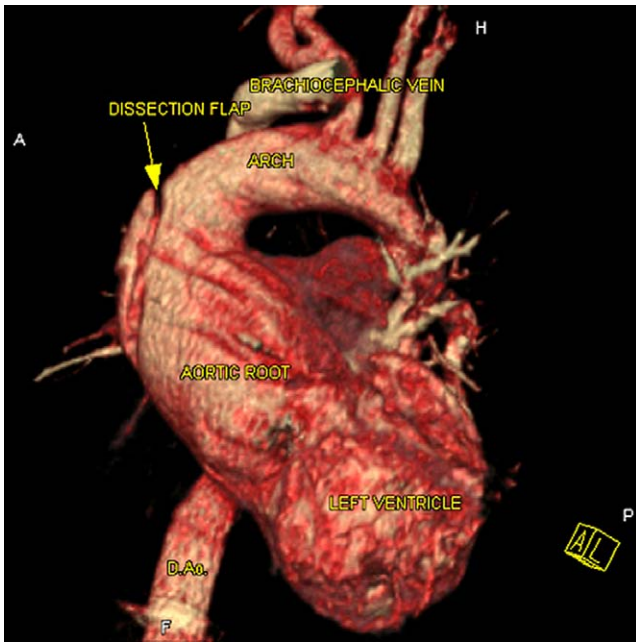
Panel B

A 19-year-old man with known Marfan syndrome presented with a 4-day history of neck pain. He has previously been diagnosed as having aortic root dilatation. Transthoracic echocardiography demonstrated that the ascending aorta was dilated (6.9 cm) with a definite flap, suggesting aortic dissection. Following urgent transfer to our tertiary cardiology centre, he underwent contrast

enhanced computed tomography angiography studies. Three-dimensional volume rendered images (Panel A: view from the front; LINV, left innominate vein; LPA, left pulmonary artery; Panel B: view from the right; SVC, superior vena cava; PA, pulmonary artery; Panel C: view from the left; D Ao, descending aorta; Panel D: right anterior oblique view; RCCA, right common carotid artery; RSCA, right subclavian artery) showed that the aortic root was grossly dilated to 6 cm in diameter. A dissection flap was demonstrated in the root and ascending aorta, but this did not reach the arch and was shown to stop approximately 6 cm short of the origin of the brachiocephalic artery. There was no dilatation of the arch or descending aorta and no evidence of arch or descending thoracic aortic dissection. The patient was referred for surgical repair of the Type A dissection. Increasingly, multislice CT has been used as the investigation of choice in suspected cases of aortic dissection.^{1–3} This modality is non-invasive and provides excellent three-dimensional visualization of aortic pathology, enabling accurate pre-operative assessment.

¹Department of Cardiology, Lancashire Cardiac Centre, Blackpool, Fylde and Wyre NHS Trust, Blackpool, Lancashire, United Kingdom; ²Department of Radiology, Lancashire Cardiac Centre, Blackpool, Fylde and Wyre NHS Trust, Blackpool, Lancashire, United Kingdom

Correspondence to: Jerzy Wojciuk, Cardiology Department, Lancashire Cardiac Centre, Blackpool, Fylde and Wyre NHS Trust, Whinney Heys Road, Blackpool, Lancashire FY3 8NR, United Kingdom. Email: dr.wojciuk@bfwhospitals.nhs.uk



Panel C



Panel D

References

- 1 Sebastia, C, Pallisa, E, Quiroga, S, Alvarez-Castells, A, Dominguez, R, Evangelista, A. Aortic dissection: diagnosis and follow-up with helical CT. *Radiographics* 1999; **19**: 45–60.
- 2 Batra, P, Bigoni, B, Manning, J, et al. Pitfalls in the diagnosis of thoracic aortic dissection at CT angiography. *Radiographics* 2000; **20**: 309–320.
- 3 Lawler, LP, Fishman, EK. Multi-detector row CT of thoracic disease with emphasis on 3D volume rendering and CT angiography. *Radiographics* 2001; **21**: 1257–1273.

'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.