Aortic dissection extending through a patent ductus arteriosus device

Giordano R. T. Alves, Klaus L. Irion, Manoj Kuduvali and Sukumaran Binukrishnan

Division of Radiology, Liverpool Heart and Chest Hospital, NHS Trust, Liverpool, UK
Division of Radiology, University Hospital of Santa Maria, Santa Maria, Brazil
Department of Radiology, Liverpool Heart and Chest Hospital, Liverpool, UK
Division of Cardiac Surgery, Liverpool Heart and Chest Hospital, Liverpool, UK

* Corresponding author. Department of Radiology. Liverpool Heart and Chest Hospital NHS Foundation Trust, Thomas Drive, Liverpool L14 3PE, UK; Tel: +44 7901545651; fax: +44 1617679073; e-mail: klaus.irion@lhch.nhs.uk (K.L. Irion).

Received 8 September 2013; received in revised form 16 November 2013; accepted 21 November 2013

Keywords: Aortic dissection • Patent ductus arteriosus • Computed tomography

A 71-year old woman presented acute dyspnoea and back pain. She reported a previous percutaneous patent ductus arteriosus (PDA) correction and ascending aorta replacement. A computed tomography (CT) scan reviewed the presence of type A aortic dissection, extending from the aortic graft, involving the pulmonary trunk through the PDA device (Fig. 1).

Figure 1: A 71-year old woman was investigated with a CT scan in 2007, which revealed a previous David’s procedure, a dilated arch and descending aorta, without dissection, and a PDA (A). She was then treated with a percutaneous PDA correction. Four years later, she was referred to our institution with acute dyspnoea and chest pain, along with a CT scan showing a type A aortic dissection, which extended from the distal anastomosis of the ascending aorta graft to the abdominal aorta. The dissection also extended into the pulmonary trunk through the ductus, which still had the PDA closure device in position (B and C). She was managed conservatively, considering the complexity of the dissections and her clinical conditions. A CT scan done a month later (not shown) reviewed stable appearances. The patient died 3 months later.