

# IMAGES

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## The chest x-ray in congenital heart disease 3

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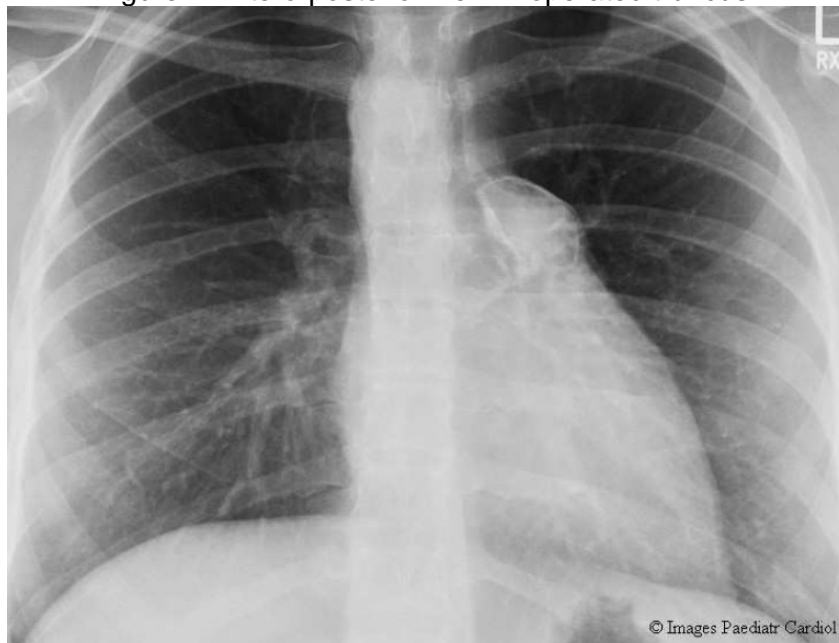
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This paper is the third of our series focusing on the chest x-ray (CXR) as a useful investigation in congenital heart disease.<sup>1</sup> Yet again, we remind the readers that the CXR is a simple, quick and cheap test that yields useful diagnostic information, heart size, lung pathology as well as providing a readily available documentation of these facts for serial comparison.

This girl had truncus repair in infancy. Figure 1 shows an antero-posterior view of the chest. The lung fields are normal. The left pulmonary artery is enlarged but the right pulmonary artery is normal. The right aortic knuckle notches the trachea. In the pulmonary area, there is extensive calcification of the walls of the homograft (right ventricle to pulmonary arteries). Joining the walls transversely is a crescent shaped calcification in the cusps of the homograft valve. The pulmonary valve is stenosed. A catheter implantable (Bonhoeffer) valve made of bovine jugular vein and valve, has been placed in a stent and fixed in the right ventricular outflow in the homograft after ballooning.

Figure 1 Antero-posterior view in operated truncus.



The cage is visible on both antero-posterior and lateral x-rays (figures 2,3) showing the valve behind the sternum. This valve was placed through a catheter from the femoral vein.

Figure 2 The cage of the implanted valve in antero-posterior view.

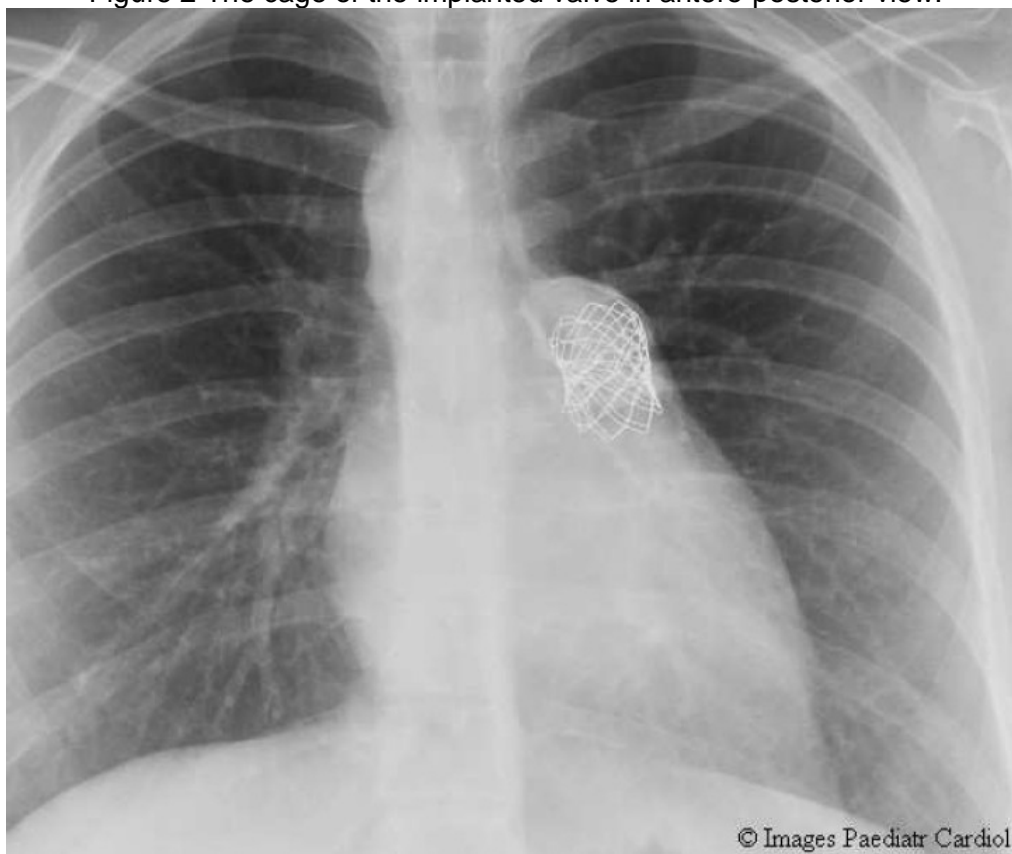
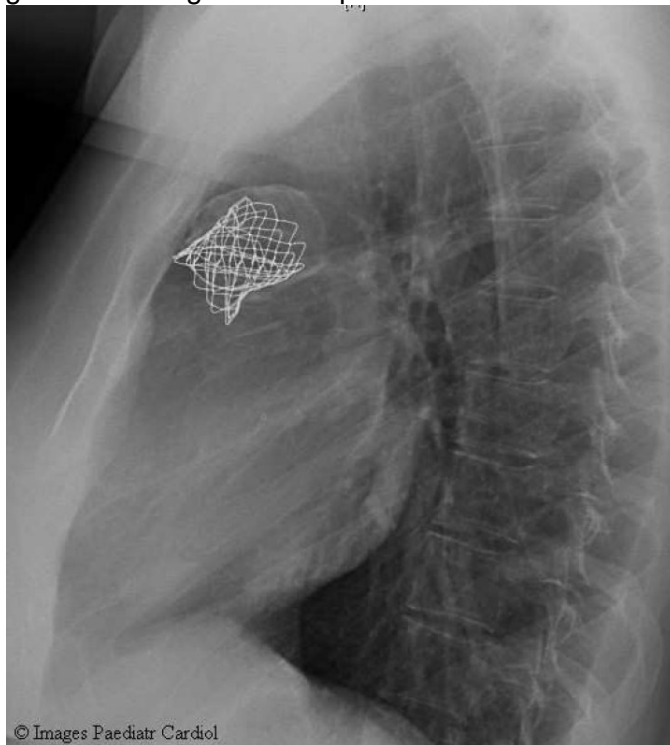
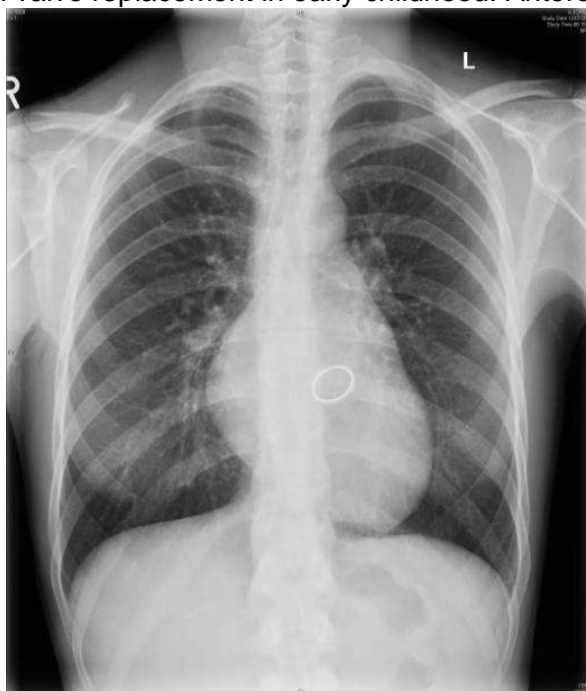


Figure 3 The cage of the implanted valve in lateral view.



Antero-posterior and left lateral chest CXR from woman aged 18 years with mitral stenosis from a valve placed at 2 years of age. Figure 4 in antero-posterior view shows a small heart, the left atrium is slightly enlarged elevating the left bronchus and making a double shadow in the right atrial shadow. A prominent left atrial appendage shows as a bulge on the left cardiac border beneath a prominent main pulmonary artery. The lung fields are normal and branches of pulmonary veins show slightly prominently to the upper lobes.

Figure 4 Mitral valve replacement in early childhood. Anteroposterior view.



The lateral view shows a prominent left atrium on the posterior heart shadow pushing the left bronchus back. The Bjork-Shiley prosthesis is seen as a ring in the mitral position.

Figure 5 Mitral valve replacement in early childhood. Lateral view.



## Reference

1. Somerville J, Grech V. The chest x-ray in congenital heart disease 1. Total anomalous pulmonary venous drainage and coarctation of the aorta. Images Paediatr Cardiol. 2009;38:7–9.

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