

IMAGES

in PAEDIATRIC CARDIOLOGY

Merrick B¹, Gatrad AR². The chest x-ray in delayed presentation of coarctation of the aorta. *Images Paediatr Cardiol* 2014;16(2):8-9.

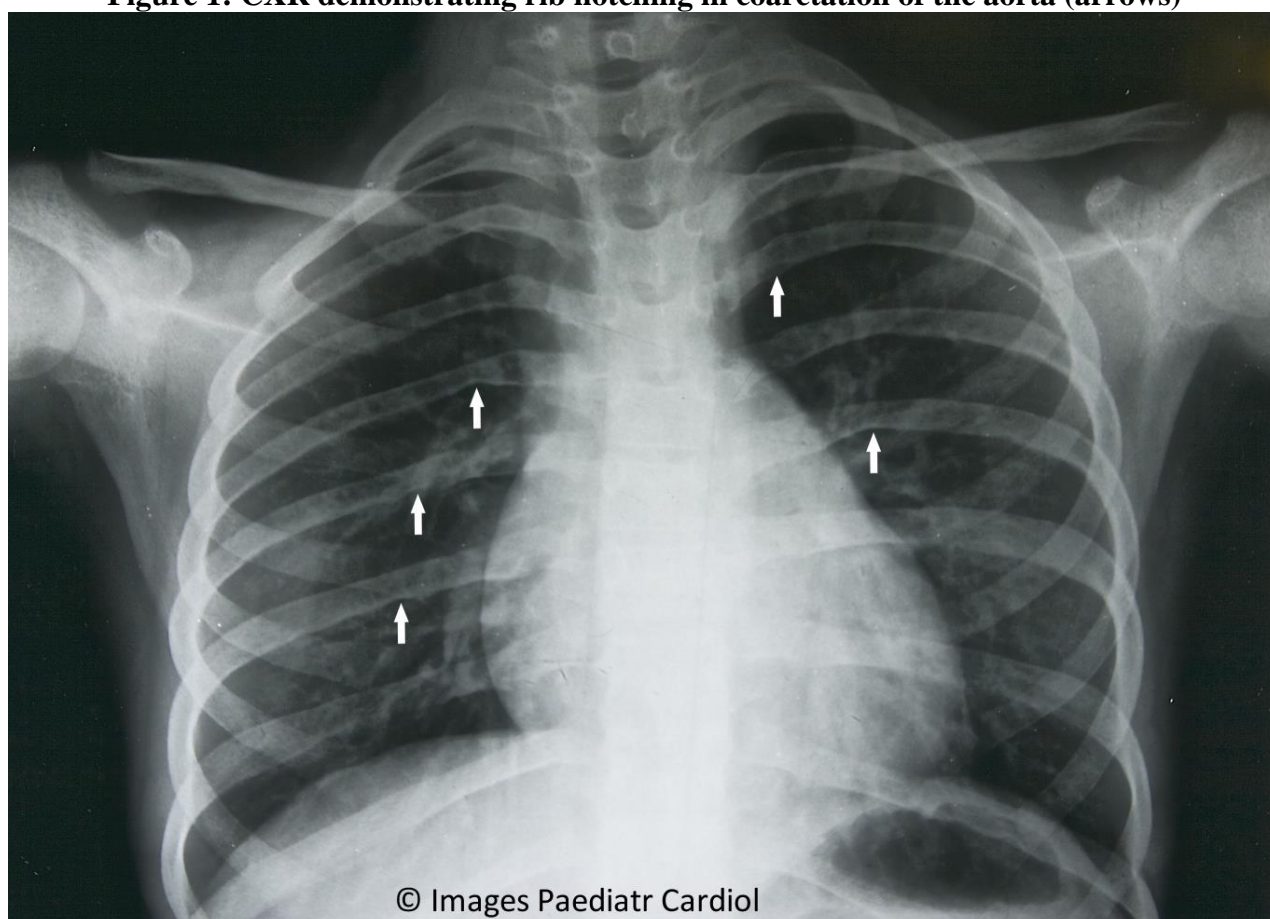
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This is the chest radiograph of a thirteen-year-old male. The study demonstrates bilateral notching of the inferior borders of the 3rd-8th posterior ribs, a finding associated with coarctation of the aorta. Blood bypasses the aortic narrowing through intercostal collaterals, which enlarge to accommodate the increased flow rates. The pulsations of these vessels cause disruption to bone remodelling leading to the characteristic notching. The 1st and 2nd ribs are spared as their intercostal vessels do not directly communicate with the post-stenotic aortic segment.

Figure 1: CXR demonstrating rib notching in coarctation of the aorta (arrows)



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The descending thoracic aorta is visualised with no obvious site of narrowing or dilatation – no characteristic ‘3’ sign. However, there a prominent and high aortic knuckle, visualised just underneath the left clavicle. There is also prominence of the right ventricular outflow tract as the left pulmonary artery lies to the back – a result of the way the investigation was taken.

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