Int J Emerg Med (2010) 3:527–528
DOI 10.1007/s12245-010-0251-3

CLINICAL IMAGES

Coarctation of the aorta in a 6 month old

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Received: 6 October 2010 / Accepted: 20 October 2010 / Published online: 8 December 2010

A 6-month-old male presented with increased respiratory efforts, a low grade fever, O_2 saturations in the high 80s and wheezing. Symptoms improved with nebulized albuterol. A chest X-ray revealed cardiomegaly and a right-sided infiltrate (Figs. 1 and 2); EKG revealed criteria consistent with left ventricular hypertrophy (LVH). An echocardiogram confirmed coarctation of the aorta (Fig. 3).

Coarctation of the aorta is a narrowing of the lumen of the aortic arch classified as either "pre-ductal" or "post-ductal" based on the location relative to the origin of the left subclavian artery [1–3]. In 85% of cases, coarctation of the aorta is seen with other congenital defects [1]. Males are twice as likely to have coarctation of the aorta, although it is a common manifestation of Turner's syndrome [1, 3].

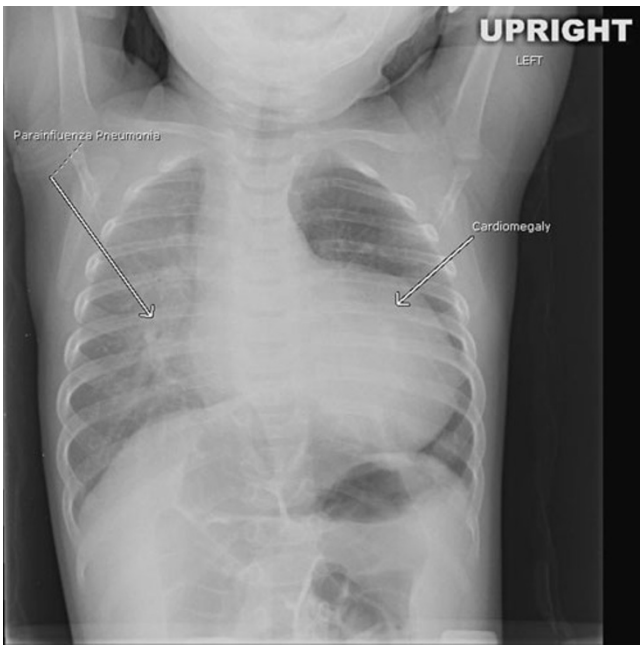

Fig. 1 Anteroposterior chest X-ray showing cardiomegaly and parainfluenza pneumonia

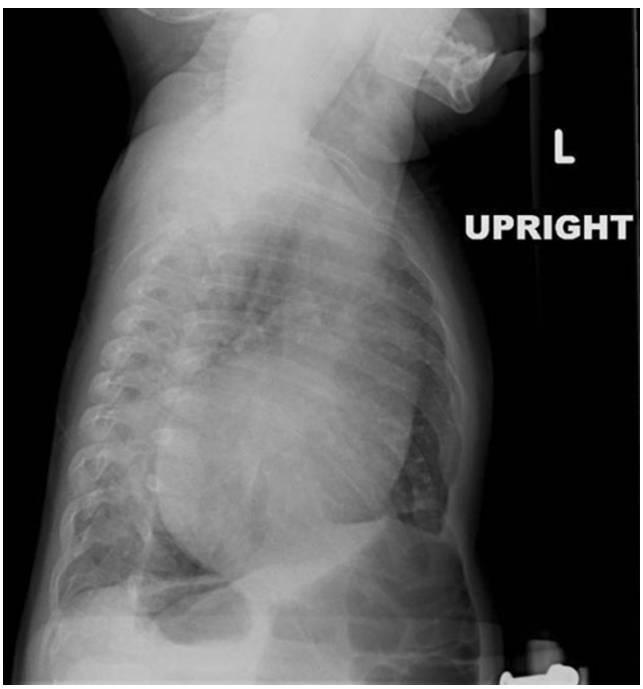

Fig. 2 Lateral chest X-ray showing cardiomegaly

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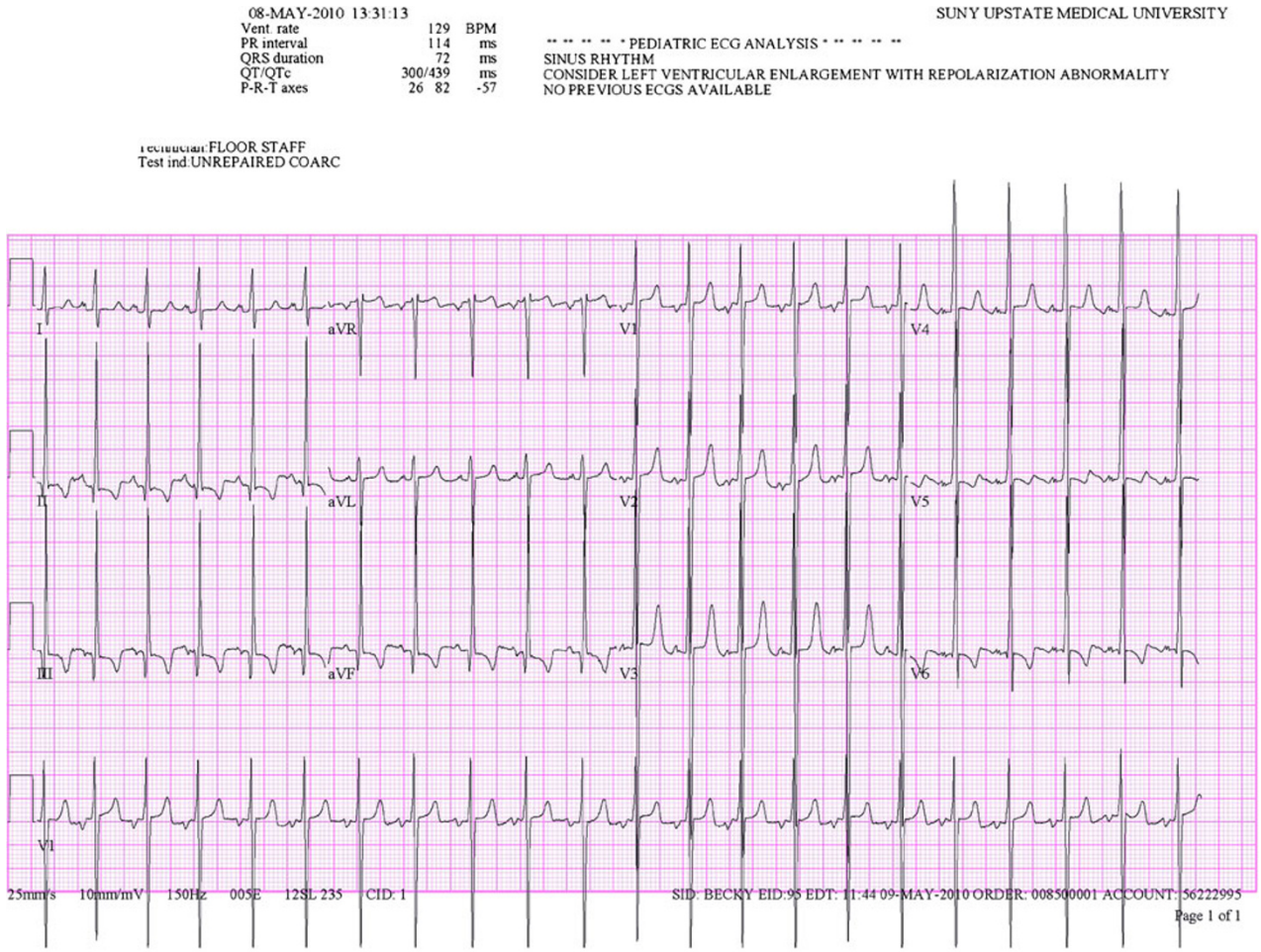

Fig. 3 EKG showing LVH consistent with cardiomegaly

The condition can also be sub-divided into infantile (within the first year of life) and non-infantile (delayed) presentation. When the ductus arteriosus closes shortly after birth, infants with coarctation can present with cardiovascular collapse and resulting cyanosis [1]. In the non-infantile presentation, collateralization of blood vessels (including intercostal, subclavian, vertebral, anterior spinal, and internal mammary arteries) allows for the distal aorta to be adequately perfused [1, 3]. In the non-infantile presentation, upper extremity systolic hypertension, a short systolic murmur in the left interscalpular area, and diminished/absent femoral pulses can be seen in otherwise asymptomatic patients [1]. Older children and adults present symptomatically with dyspnea, headache, and/or leg fatigue [1, 3]. Our patient presented early because a para-influenza pneumonia stressed his cardiopulmonary system, caused wheezing, and led a prudent physician to obtain a chest X-ray in this "first-time wheezer."

Acknowledgments Research was performed at the SUNY Upstate Medical Center Department of Emergency Medicine.

Conflict of interest None.

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