The chest x-ray in congenital heart disease 4

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This paper is the fourth of our series focusing on the chest x-ray (CXR), highlighting that this remains a useful and relatively cheap investigation in congenital heart disease and allows objective serial comparison.

These x-rays are from a female aged 45 years with a secundum atrial septal defect and pulmonary hypertension. Figure one shows a very large heart and gross pulmonary artery dilatation, evidence of longstanding left to right shunt with pulmonary artery dilatation to periphery of lungs and prominent pulmonary veins in upper lobes.

Figure 1 CXR showing secundum atrial septal defect and pulmonary hypertension.
The patient returned to Grown Up Congenital Heart Clinic (GUCH) with more dyspnoea and oedema after 3 months of nonsteroidal (NSAID) therapy given without consultation by a general practitioner for joint pains.

Figure 2 shows the repeat CXR which shows increase in heart size, prominent right atrium, added fuzzy appearance in lungs (probably oedema), the direct outcome of fluid retention. The same may happen with the onset of atrial fibrillation but this patient remained in sinus rhythm.

NSAIDs should be used with caution in patients with cardiac compromise.

Figure 2 Deterioration on CXR with administration of NSAIDs.