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Diagnostic chest X-ray in atrial septal defects

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A 66-year-old woman with lower limb edema and exertional dyspnea presented to the emergency department. Posteroanterior chest X-ray revealed a Fleischner's sign in both lungs (Figure 1A) suggesting a pulmonary hypertension. A subsequent transthoracic echocardiogram revealed a 24 mm diameter secundum atrial septal defect (ASD) (Figure 1B) with a dilated right heart and a mean pulmonary pressure of

68 mmHg. Fleischner's sign refers to a prominent central pulmonary artery that can be commonly caused either by pulmonary hypertension or acute pulmonary embolism. This radiological finding is very rare in patients with secundum ASD unless the defect remains undiagnosed till the elderly. Chest X-ray remains fundamental in making diagnosis of cardiovascular disease.

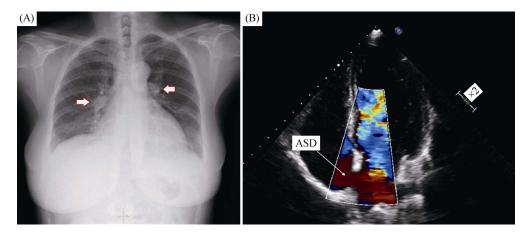


Figure 1. Fleischerner's sign in both lungs of a patient with secundum ASD. (A): Posteroanterior chest X-ray revealed a Fleischner's sign in both lungs (arrows) suggesting a pulmonary hypertension; and (B): transthoracic echocardiogram revealed a 24 mm diameter secundum ASD with a dilated right heart and a mean pulmonary pressure of 68 mmHg. ASD: atrial septal defect.

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