

CLINICAL IMAGE

Diagnostic Fleischner's sign in atrial septal defect

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Abstract

Fleischner sign is very rare in patients with ASD unless the defect remains undiagnosed till the elderly. For adulthood people with Fleischner sign, we should think about the possibility of congenital heart disease.

KEYWORDS

atrial septal defect, Fleischner's sign, hepatic veins, radiography

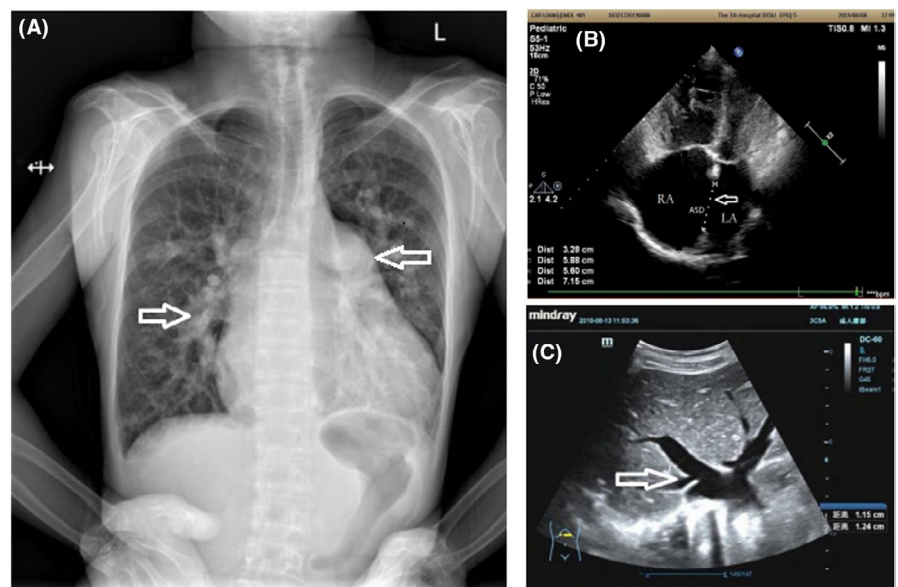
1 | CASE DESCRIPTION

Fleischner sign is very rare in patients with ASD unless the defect remains undiagnosed till the elderly. For adulthood

people with Fleischner sign, we should think about the possibility of congenital heart disease.

A 40-year-old woman with shortness of breath and chest tightness presented to the emergency department.

FIGURE 1 Imaging findings of a patient with secundum ASD. (A) Posteroanterior chest X-ray revealed a Fleischner sign in lung (arrows), suggesting a pulmonary hypertension and (B) transthoracic echocardiogram revealed a 35-mm-diameter secundum ASD with a dilated right heart and a mean pulmonary pressure of 57 mmHg. (C) Hepatic vein dilatation of a patient with secundum ASD



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Posteroanterior chest X-ray revealed a Fleischner sign in lung (Figure 1A), suggesting a pulmonary hypertension. A subsequent transthoracic echocardiogram revealed an arterial septal defect (ASD) with a dilated right heart and a mean pulmonary pressure of 57 mmHg (Figure 1B). Abdominal ultrasound showed widening of the hepatic veins to a maximum of about 1.2 cm (Figure 1C).

Fleischner sign refers to a prominent central pulmonary artery that can be commonly caused either by pulmonary hypertension or by a distension of the vessel by a large pulmonary embolus involving 50% or more of the major pulmonary artery branches.¹ Hepatic vein dilatation means that venous return is blocked and can be observed in patients with right heart insufficiency. Those findings are very rare in patient with secundum atrial septal defect unless the defect remains undiagnosed till the adulthood.

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CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

AUTHOR CONTRIBUTIONS

Bailang Chen: designed the project and wrote the manuscript. Zhibin Lan: collected and created the figures. All authors have read and approved the final manuscript.

ETHICAL APPROVAL

Not required.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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