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Clinical Image

Incidental radiological finding of partial anomalous pulmonary vein drainage☆

Hallazgo radiológico incidental de un caso de drenaje venoso pulmonar anómalo parcial

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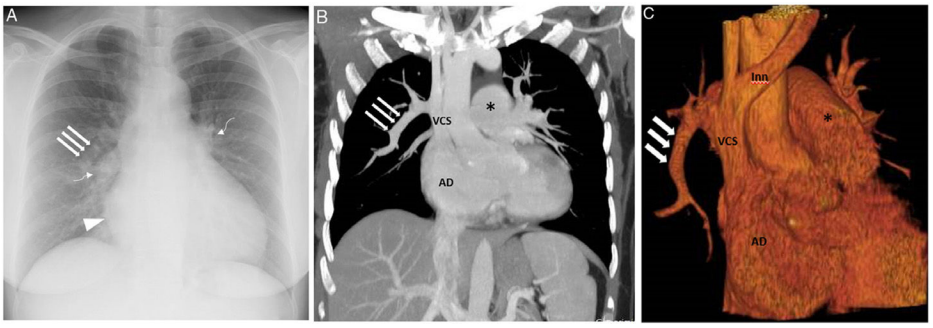

Fig. 1. A) Chest X-ray (posteroanterior projection) showing an enlarged right atrium (arrowhead) and an increase in the size and density of both hili (curved arrows); note the presence of a tubular structure in the right lung (straight arrows). B and C) Coronal reconstruction MIP (maximum intensity projection) (B) and 3D (C) images confirming the existence of drainage from the right upper lobe vein to the superior vena cava (straight arrows). Furthermore, the venous return of the middle lobe and several segments of the right lower lobe also drained into this tubular structure. Signs of precapillary pulmonary hypertension with increased pulmonary artery trunk width (asterisk) and secondary RA enlargement are seen. RA: right atrium; Inn: innominate vein; SCV: superior vena cava; RV: right ventricle.

Partial anomalous pulmonary venous connection (PAPVC) is an unusual congenital vascular disease that is often diagnosed incidentally. It consists of the connection of one (or more) pulmonary veins to a systemic vein, causing left-to-right shunt. It is usually asymptomatic, but when associated with other malformations or if the shunt is significant, it may sometimes cause severe pulmonary hypertension.[1] The most common form of PAPVC is drainage from the right upper lobe vein to the superior vena cava; this form is usually associated in 80% of cases with sinus venosus atrial septal defect (ASD).[2]

We report a case of PAPVC diagnosed incidentally on a chest computed tomography (CT) scan in an asymptomatic 51-year-old woman. The CT scan showed a PAPVC involving drainage from the right upper lobe, the middle lobe, and some segments of the right lower lobe to the superior vena cava, which resulted in dilation of right heart cavities and signs of precapillary pulmonary hypertension (Fig. 1B and C). Our case is interesting because of the patient's age at presentation (despite significant PAPVC) and the absence of concomitant venous sinus ASD. A wait-and-see approach was decided by consensus, given the good biventricular function and the lack of symptoms.

References

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