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Images in Cardiology: Three-Dimensional Computed Tomography Imaging of Left Atrial Anatomy for Atrial Fibrillation Ablation

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FIG. 1 Posterior view of the left atrium demonstrating the spatial relationships between the pulmonary veins (PV). There is a small additional pulmonary vein near the os of the right lower pulmonary vein.

FIG. 2 Endocardial view demonstrating spatial relationships between the pulmonary vein ostia. The small additional os near the right lower pulmonary vein is also visualized.

Computed tomographic angiography can visualize details of left atrial structure relevant for atrial fibrillation (AF) ablation. In this example from a patient with a history of paroxysmal AF referred for pre-ablation assessment of pulmonary veins, three-dimensional images define pulmonary vein locations and demonstrate an additional small pulmonary vein near the right lower pulmonary vein (Fig. 1). Endocardial images provide anatomic detail of the spatial relationships between the ostia of the pulmonary veins (Fig. 2). These images supplement and enhance the understanding of two-dimensional images, providing a more comprehensive analysis of atrial structure for left atrial ablation procedures.

Reference

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