

## IMAGES IN INTERVENTION

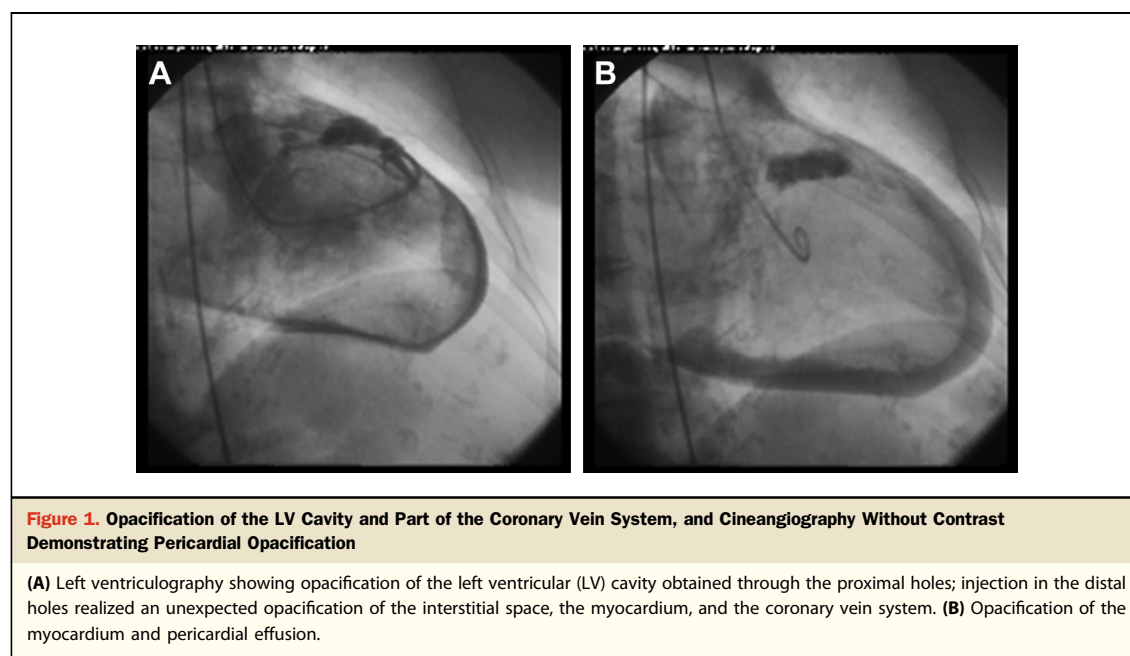
# Unintentional “Ventriculo-Phlebo-Myo-Pericardiography”

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An 83-year-old woman with severe aortic stenosis was referred for invasive evaluation. A left Amplatz II catheter was needed to cross the stenotic aortic valve. Thereafter, an exchange wire

the venous system and the proximal holes in the LV. During ventriculography, opacification of the LV was obtained through the proximal holes (Fig. 1A, [Online Video 1](#)), whereas injection in



was used to insert a pigtail catheter in the left ventricular (LV) cavity. The operator did not realize that the Amplatz left catheter was inserted in the Thebesian venous system. Using the wire exchange, these veins were penetrated; once the pigtail was inserted, the distal holes were in

the distal holes realized an unexpected opacification of the interstitial space, the myocardium, as well as the coronary vein system (Thebesian veins and the coronary sinus). Deep penetration and forced injection in these structures provoked a myocardial laceration, explaining opacification of the myocardium and pericardial effusion (Fig. 1B, [Online Video 2](#)).

Surgical aortic valve replacement was decided. Perioperative findings consisted of marked pericardial inflammation and pericardial effusion. Myocardial hematoma and adhering thrombus were observed at the lesion site.

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Thebesian veins are small, valveless venous channels representing communication between the coronary artery and/or coronary venous system and a chamber of the heart. They are more common in the atria than in the ventricles, especially in the right chamber.

In the area of transcatheter aortic valve implantation, crossing the aortic valve is commonly realized. The present rare complication should be promptly recognized because of its potentially life-threatening implication.

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