Inadvertent Thebesian Vein Cannulation During Radial Access Ventriculography

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The first case is of a 72-year-old woman undergoing angiography for aortic stenosis workup via the right radial approach. An Multipurpose 1 (MPA-1) catheter, Cordis Corporation, East Bridgewater, New Jersey) was used to direct the wire across the valve and subsequently used for ventriculography due to difficulty crossing the severely stenosed valve. There was visualization of the thebesian vein, coronary vein, and sinus. Still image (Fig. 1) during injection of contrast with filling of the thebesian veins (black arrows), coronary veins (thin white arrows), and coronary sinus (thick white arrow).

The second case is of a 77-year-old woman undergoing angiography for investigation of chest pain via the right radial approach. Left ventriculography was performed with a Tiger catheter with visualization of the thebesian veins and coronary veins. Still image (Fig. 2) during injection of contrast with filling of the thebesian veins (black arrows) and coronary veins (white arrows), without coronary sinus opacification. The thebesian veins are valveless conduits arising from all 4 cardiac chambers and communicating with the coronary sinus. The thebesian veins may act as an alternate route of nutrition to the myocar-
nonpigtail catheters for ventriculography. Although the Tiger and other dedicated radial catheters do have single or double side holes, these may not be sufficient to prevent thebesian cannulation and potential for myocardial trauma, as suggested by the images.

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REFERENCES


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