Valve of Vieussens: An obstacle for left ventricular lead placement

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Figure 1 Initial venogram taken showing an atypical coronary sinus (CS) draining a prominent vein of Marshall (VOM). A Atrial pacemaker lead; V Ventricular pacemaker lead

An 80-year-old woman was upgraded from a dual-chamber to a biventricular pacemaker system. Sinus node disease was the indication for conventional atrioventricular pacing, which was associated with deterioration of cardiomyopathy over the previous three years. To facilitate left ventricular pacemaker lead implantation, an 8 Fr guiding sheath was placed into the coronary sinus. Contrast injection opacified only the proximal coronary sinus draining a prominent vein of Marshall. The initial venogram taken in the 30° left anterior oblique projection (Figure 1) gave the appearance of an atypical coronary sinus course that was unfavourable for left ventricular lead placement. The presence of a valve of Vieussens was considered to be impeding the advancement of the coronary sinus guiding sheath in the

Figure 2 The complete coronary sinus (CS) system, including the posterolateral vein (PLV), could be visualized on venography after successful cannulation of the complex valve of Vieussens (arrow). GCV Great cardiac vein; VOM Vein of Marshall

present case (1). Entry into the great cardiac vein was achieved using a hydrophilic guidewire to avoid coronary sinus dissection. After successful cannulation of the complex valve of Vieussens (Figure 2), the complete coronary sinus system, including the desired posterolateral tributary, was visualized with occlusive venography in 30° left anterior oblique projection.

REFERENCE

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Received for publication January 18, 2007. Accepted February 24, 2007