Virtual Cardioscopy-Guided Surgical Resection for Left Ventricular Outflow Tract Obstruction

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An 8-year-old boy with Taussig-Bing anomaly after experiencing sequelae of moderate subaortic stenosis from a previous Jatene operation was admitted for surgical intervention. Cardiac catheterization verified this stenosis. Contrast-enhanced cardiac computed tomography was performed, which disclosed that the malaligned outlet ventricular septum was the underlying cause of this obstruction. Virtual cardioscopy (1,2) for surgical planning was reconstructed and showed this subaortic stenosis with viewing from ascending aorta before operation (A, Online Video 1). Transaortic surgical resection was performed to increase the diameter of the subaortic tunnel as planned. Post-operative virtual cardioscopy viewing from the ascending aorta showed the enlarged subaortic tunnel without any pressure gradient on echocardiography (B, Online Video 2). L = left-facing sinus; N = non-facing sinus; R = right-facing sinus.

REFERENCES
