Medical Image of the Week: Fontan Procedure

Figure 1. Thoracic CT scan showing Fontan anatomy with the superior vena cava (SVC) connected to the pulmonary arteries (yellow arrow) and a single atrium and ventricle (red arrow).

Figure 2. SVC venography shows SVC connected to the pulmonary artery.
A 25-year-old man with a history of transposition of the great vessels (L-TGA) was admitted for persistent hemoptysis. He had a history of a double inlet left ventricle, pulmonary hypertension, and was postoperative for a Fontan procedure completed at age of 2. No anatomical source for the hemoptysis was found. A thoracic CT showed the Fontan anatomy: SVC connected to the pulmonary artery as per the Glenn connection (IVC drained to right pulmonary artery through the Fontan pathway) and a single ventricle and atrium (Figure 1). SVC venography showed the SVC connected to the pulmonary artery (Figure 2). The hemoptysis resolved after started sildenafil and bosentan for pulmonary hypertension.

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