ALCAPA in a 49-Year-Old Female Presenting with an Episode of Ventricular Fibrillation

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Clinical Image
A 49-year-old female patient presented with an episode of ventricular fibrillation. ALCAPA (anomalous left coronary artery from the pulmonary artery) was diagnosed and treated with coronary artery bypass grafting. In ALCAPA, coronary ischemia occurs due to a steal phenomenon: collaterals from the right coronary artery fill-up the left anterior descending artery (LAD) and the circumflex artery in a retrograde fashion because of the lower pressure in the pulmonary artery. Preoperatively, the monstrous right coronary artery filled the left system in a retrograde fashion: CT-scan (1a), angiogram (1b) and intraoperatively (2a). A saphenous vein graft (SVG) was anastomosed to the LAD (2b), and the aberrant ostium in the pulmonary artery was closed, so that the coronary flow in the left system became antegrade.

Figure 1: