A 46-year-old man was admitted into hospital for acute chest pain. A cardiac dual source computed tomography (CT) examination (Somatom Definition, Siemens Medical Solutions, Forchheim, Germany) was performed to evaluate thoracic vessels and rule out coronary artery disease. Within a single breath hold, moderate ductal coarctation of the aorta (maximum diameter, 15.0 mm; area, 2.8 cm²) without significant collateral vessels, severe stenosis at the origin of the left subclavian artery, mild post-stenotic descending aortic dilatation, severely calcified bicuspid aortic valve, concentric left ventricular hypertrophy due to aortic valve stenosis.
ventricular hypertrophy (Fig. 1, Video 1), and normal coronary arteries with a left dominant system (Fig. 2) was demonstrated. The patient underwent surgery for aortic valve replacement. No preoperative conventional coronary angiography was performed.

References


Fig. 2. Normal coronary arteries. (a) Left anterior descending artery. (b) Circumflex artery (left dominant system). (c) Right coronary artery. (d) Volume rendered image of the coronary tree.