Multiple Giant Coronary Artery Aneurysms in Kawasaki Disease

Ryohei Ono, MD, and Nobuhiro Umehara, MD, PhD

A 35-year-old man with a history of Kawasaki disease and coronary artery aneurysms (CAAs) at the age of 1 year, for which a coronary artery bypass graft surgical procedure (saphenous vein graft to the left anterior descending [LAD] artery because of the occluded left internal thoracic artery) was performed, presented with dyspnea on exertion. On arrival at our institution, his vital signs were stable, but electrocardiography revealed T-wave inversions in leads V1 through V3. Chest radiography revealed an abnormality of the contour of the left cardiac border (Supplemental Figure 1, available online at http://www.mayoclinicproceedings.org), and chest computed tomography revealed bulky calcified masses on the left ventricle (Supplemental Figure 2, available online at http://www.mayoclinicproceedings.org). Coronary computed tomography revealed multiple CAAs in the bilateral coronary arteries (Figure). Coronary angiography also revealed giant CAAs and extensive stenoses in the LAD artery and left circumflex artery, and the bypass was occluded. Hence, the patient underwent a coronary artery bypass graft procedure (the right internal thoracic artery to the LAD artery and the aorta to the saphenous vein graft to the posterior lateral artery) with surgical aneurysmal ligation, which relieved his symptoms.

Kawasaki disease, an acute vasculitis, occurs predominantly in infants. Coronary artery aneurysms are the most serious complications of Kawasaki disease.1 Giant CAAs are extremely rare, with a reported incidence of 0.02%.2,3 To date, only 2 cases of simultaneous multiple giant CAAs involving all 3 major coronary arteries have been reported.4,5 Although there is no standard treatment guideline for CAAs because of their rarity, surgical management is indicated in symptomatic patients with obstructive coronary artery disease.5

SUPPLEMENTAL ONLINE MATERIAL
Supplemental material can be found online at http://www.mayoclinicproceedings.org. Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.

Potential Competing Interests: The authors report no competing interests.

Correspondence: Address to Ryohei Ono, MD, Department of Cardiovascular Medicine, Chiba University Graduate School of Medicine, 1-8-1 Inohana, Chuo-ku, Chiba 260-8670, Japan (ryohei_ono_0820@yahoo.co.jp).

ORCID
Ryohei Ono: https://orcid.org/0000-0002-4875-7470

REFERENCES