IGG4-RELATED INFLAMMATORY PSEUDOTUMOR IN THE HEART

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To the Editor:

We read with great interest the article by Carbajal et al. that described a 59-year-old Caucasian woman who had been diagnosed with pseudotumor in the eye, which was later histologically determined to be related to IgG4.¹ Of note, the patient had multiple autoimmune-related disorders in other organs and a family history of coronary artery disease.

Until recently, the heart has been one of the organs least affected by IgG4-related disease.² However, this may be partly attributed to the difficulty and/or danger of tissue sampling from the cardiac and coronary tissues, which is essential to histologically prove IgG4-positive lymphocytic infiltration and in turn diagnose IgG4-related disease. Nevertheless, several case reports have been published regarding IgG4-related cardiovascular pathologies thus far, including ours.³ We experienced a 66-year-old Japanese man who was admitted with chest pain and diagnosed to have coronary artery disease.⁴ Coronary angiography showed feeding-artery-like images, and a follow-up computed tomography (CT) revealed pericoronary tumefactive lesion, suggestive of inflammatory pseudotumor. The patient underwent coronary bypass surgery, and the histology of this pericoronary mass showed marked IgG4-positive plasma cell infiltration. With the elevation of serum IgG4 levels, these observations led to the diagnosis of IgG4-related inflammatory pseudotumor of the coronary artery. In this case, luminal stenosis and the calcification of the arterial wall were present at the site of the left circumflex coronary artery that was surrounded by this tumor.⁵

As in the case presented by Carbajal et al., IgG4-related pericoronary artery inflammation may not necessarily be associated with luminal narrowing according to the published case reports. Although their patient experienced chest pain episode, the cardiac stress testing was normal. The chest symptom may be evoked by cardiac ischemia as well as pericarditis in patients with IgG4-related cardiovascular disease.⁶

Considering the worldwide spread of imaging modalities that can potentially target cardiovascular tissue, such as electrocardiogram-

gated CT and positron emission tomography, diagnosis of IgG4-related diseases in the heart, including coronary artery and pericardial disease, may become more feasible. The interesting article by Carbajal et al. indicates that IgG4-related cardiovascular disease should receive attention from not only cardiology physicians but also from physicians in other subspecialties, including ophthalmology, endocrinology, hematology, and orthopedic surgery.

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