Isolated left ventricular diverticulum in an adult

Congenital left ventricular diverticulum is a rare cardiac malformation. It is mostly asymptomatic. Most of the left ventricular diverticula are located at the apex of the left ventricle, but they may also be found in any other location.

A 38-year-old man was admitted to our hospital with atypical chest pain of six-month history. There was no other symptom. He was a smoker (1/4 pack/day for four years). He had no family history of cardiac events. Vital and laboratory findings were in normal range. Physical examination showed normal findings. His electrocardiogram showed sinus rhythm with 70 beats/min without any ST-T abnormalities.

Upon suspicion of coronary artery disease, we decided to perform multislice computed tomography to examine the entire coronary artery tree. The patient’s coronary artery tree was normal and there was no lesion other than a diverticulum, 10 mm in size, located in the inferoseptal wall of the left ventricle (Figures A and B). Considering asymptomatic and benign nature of isolated left ventricular diverticuli, we decided to follow-up the patient with medical therapy.

Figures. (A) Short-axis and (B) two-chamber maximum intensity projection images showing a 10-mm diverticulum in the inferoseptal wall of the left ventricle.