

## Asymptomatic giant left ventricular pseudoaneurysm in a true aneurysm following anterior myocardial infarction

### Anteriyor miyokart enfarktüsü sonrası sol ventriküler gerçek anevrizma içerisinde gelişen semptomsuz yalancı anevrizma

Uğur Canpolat

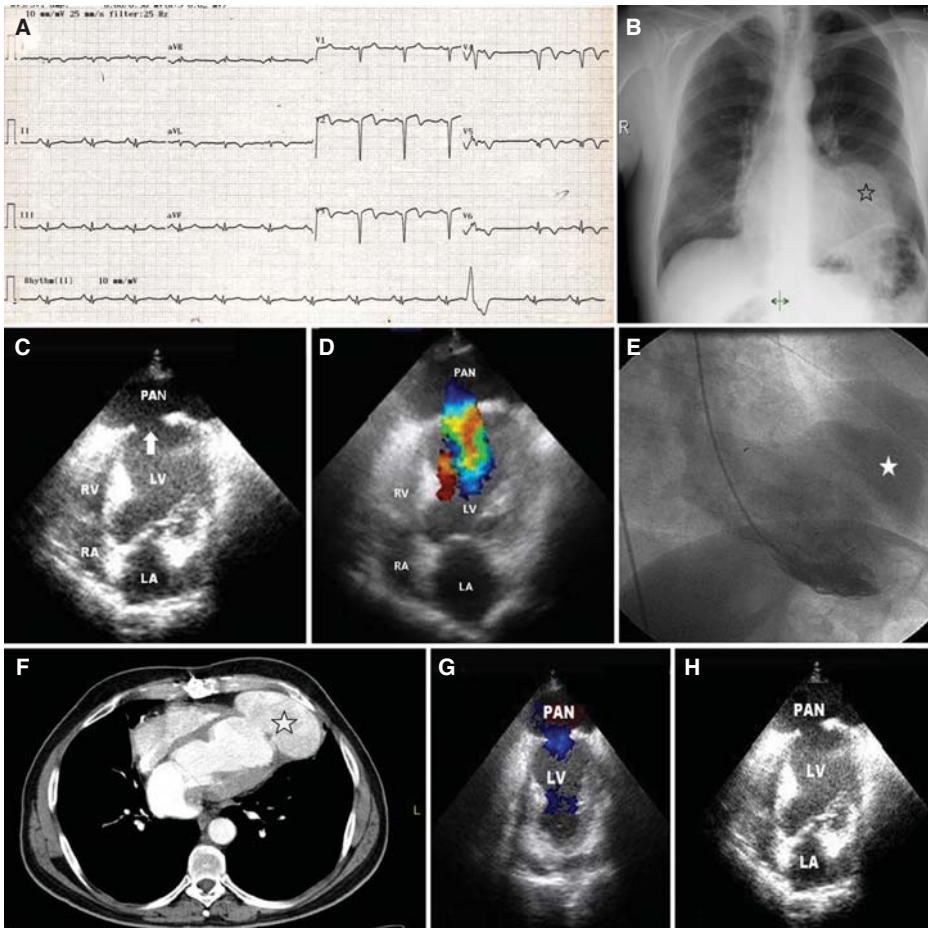
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A 55-year-old male with a history of anterior myocardial infarction (8 years ago) admitted to our hospital with the complaint of fatigue. His physical examination was unremarkable except for an apical 2/6 systolic murmur. The ECG showed sinus rhythm, Q waves and ST segment elevation at V1-5 leads (Fig. A). Chest X-ray revealed increased cardiothoracic ratio with rounded opacity silhouetting the left cardiac border (Fig. B). Transthoracic echocardiography (TTE) demonstrated a large apical left ventricular (LV) aneurysm and discontinuity (widest diameter 3.67 cm) in connection with an echo-free space, suggestive of a giant pseudoaneurysm (Fig. C). The maximum end-systolic pseudoaneurysmal diameters were 15.2x9.5 cm. Color Doppler showed flow passage from the LV into the pseudoaneurysm and pulsed Doppler demonstrated systo-diastolic flow through the false aneurysmal mouth (Fig. D). Coronary angiography revealed a totally occluded left anterior descending artery and ventriculography showed an apical aneurysm (Fig. E). Multidetector computed tomography (MDCT) showed nested true and giant pseudoaneurysms (Fig. F) and cardiac magnetic resonance imaging clearly demonstrated the communication to the LV and the size of the pseudoaneurysm with a small thrombus. Surgery confirmed the diagnosis, and endoaneurysmorrhaphy of the myocardial hole was performed via pericardial patch. However, recurrence of the pseudoaneurysm occurred two months after surgery (Figs. G and H). The patient declined to undergo a second operation and he was asymptomatic at 7 years follow-up with no enlargement of the pseudoaneurysm. Although acute free intrapericardial rupture usually causes cardiac tamponade and death, LV pseudoaneurysm formation may be a very uncommon finding in chronic myocardial infarction.



**Figures—** (A) Initial ECG revealed sinus rhythm and previous anterior infarction. (B) Chest X-ray showing a rounded opacity silhouetting the left cardiac border (star). (C) Two-dimensional TTE images. Apical-4-chamber view reveals the LV apical pseudoaneurysm in true aneurysm. (D) Color Doppler reveals communication between LV and pseudoaneurysm. (E) Apical aneurysm on ventriculography (star). (F) On MDCT pseudoaneurysm was shown with thin wall without myocardial layer (star). (G) Appearance of PAN on parasternal short-axis view at post-operative period. (H) Apical-4-chamber view showing PAN at 7th year follow-up visit. LA: Left atrium; LV: Left ventricle; PAN: Pseudoaneurysm; RA: Right atrium; RV: Right ventricle.