

Case images

Olgu görüntüsü

Percutaneous approach to giant coronary artery aneurysm: successful implantation of covered stent graft

Dev koroner arter anevrizmasına perkütan yaklaşım: Başarılı kaplanmış greft stent implantasyonu

Fatih Yılmaz¹

Tugba Aktemur²

Aykun Hakgör¹

Zübeyde Bayram¹

Cem Doğan¹

¹Department of Cardiology, Koşuyolu Yüksek İhtisas Training and Research Hospital, İstanbul, Turkey

²Department of Cardiology, Ersoy Hospital Group, İstanbul, Turkey

A 65-year-old male patient was referred with exertional chest pain. He had a history of left anterior descending artery (LAD) stent and hypertension. The patient was diagnosed as non-ST elevation myocardial infarction (non-STEMI) due to ischemic changes on the electrocardiogram and a high troponin level. Coronary angiography illustrated a subtotal occlusion of the circumflex artery (Cx) and a giant saccular aneurysm

(4.8 cmx4.8 cm) in the right coronary artery (RCA) (Figures A, B, Video 1*). Fourteen days after the initial management of the culprit lesion in the Cx, percutaneous management of the RCA aneurysm was planned. The

ostium of the right coronary artery was cannulated with an 8-F guide catheter, and a 0.014-in standard floppy guidewire was used to cross the aneurysm. Polytetrafluoroethylene-covered stents (Graftmaster; Abbott Vascular, Inc., Abbott Park, IL, USA), 4.8x16 mm, 4.8x26 mm, and 4.8x16 mm in size, were implanted sequentially (Video 2*). No distal embolization was seen (Figure C, Video 3*). The patient was discharged uneventfully 3 days after graft stent implantation on dual antiplatelet therapy. In this case, surgical repair was recommended; however the patient did not agree to surgery. In order to prevent further complications, such as rupture or distal embolization, we decided to perform a percutaneous intervention. The benefit of covered stent graft has already been shown in LAD aneurysms, and ruptured aneurysms and small RCA aneurysms; however, the experience in giant RCA aneurysms is limited. PTFE-covered stent grafts were a safe and effective alternative in this patient with a giant RCA aneurysm.



Figures– (A, B) Giant right coronary artery aneurysm detected incidentally during coronary angiography (4.8x4.8 cm), **(C)** Right coronary artery after implantation of stent graft.

*Supplementary video files associated with this presentation can be found in the online version of the journal.