Letter to the Editor

In-stent graft restenosis in the carotid artery. What is your opinion about this patient?

Ersan Tatli, Sabiye Yilmaz

Department of Cardiology, Sakarya University School of Medicine, Sakarya, Turkey

Submitted: 19 July 2016
Accepted: 10 September 2016

Arch Med Sci Atheroscler Dis 2016; 1: e101–e102
DOI: 10.5114/amsad.2016.62405

Corresponding author:
Ersan Tatli
Department of Cardiology
Sakarya University
School of Medicine
Sakarya, Turkey
Phone: +90 2842362182
E-mail: ersantatli@yahoo.com

We previously reported the case of a 57-year-old male patient with a history of acute amaurosis fugax. Carotid angiography was performed as blood pressure differed between his left and right arms and there was a pan-systolic murmur on the left common carotid artery. Total occlusion of the proximal right brachiocephalic artery and a thrombus occluding 90–99% of the left internal carotid artery were detected by carotid angiogram.

Cerebral perfusion was totally dependent on the left carotid artery system. Left internal carotid artery stenting was the chosen therapy but brain perfusion needed to be protected. The right common carotid artery occlusion meant a proximal blocking-based protection system could not be used as there was a high probability of embolism formation from the thrombus on the blocking lesion.

We decided to place a graft-covered stent through the lesion first, and contain the plaque and thrombus between the stent and the lumen. Therefore, a graft-covered stent (5 × 13, Direct) was implanted with 12 atm pressure. Later, we opened the self-expanding stent (7 × 10 × 30, Cristallo) and dilated the stent using a post-dilatation balloon (5 × 20, Tarcomgrande) without the distal protection device system. A self-expanding stent and graft-covered stent were successfully implanted, and there were no complications. This case was published in a journal [1].

However, the patient presented transient ischemic attacks after three years. Digital subtraction angiography showed 99% in-stent restenosis in the overleap segment of both stents (Figure 1). The patient had a history of hypertension, coronary artery disease, hyperlipidemia and diabetes mellitus. The patient has been treated with aspirin (100 mg), clopidogrel (75 mg) and atorvastatin (40 mg), amlodipine (10 mg) and perindopril (10 mg/day) and subcutaneous insulin therapy for the last 3 years. On physical examination, his pulse was 80 bpm, and blood pressure was 135/85 mm Hg in the left arm and 80/60 mm Hg in the right arm. The laboratory tests revealed an low-density lipoproteins (LDL) level of 120 mg/dl (3.1 mmol/l) and a glycated hemoglobin level of 7%.

What is your opinion about this patient?

Conflict of interest

The authors declare no conflict of interest.

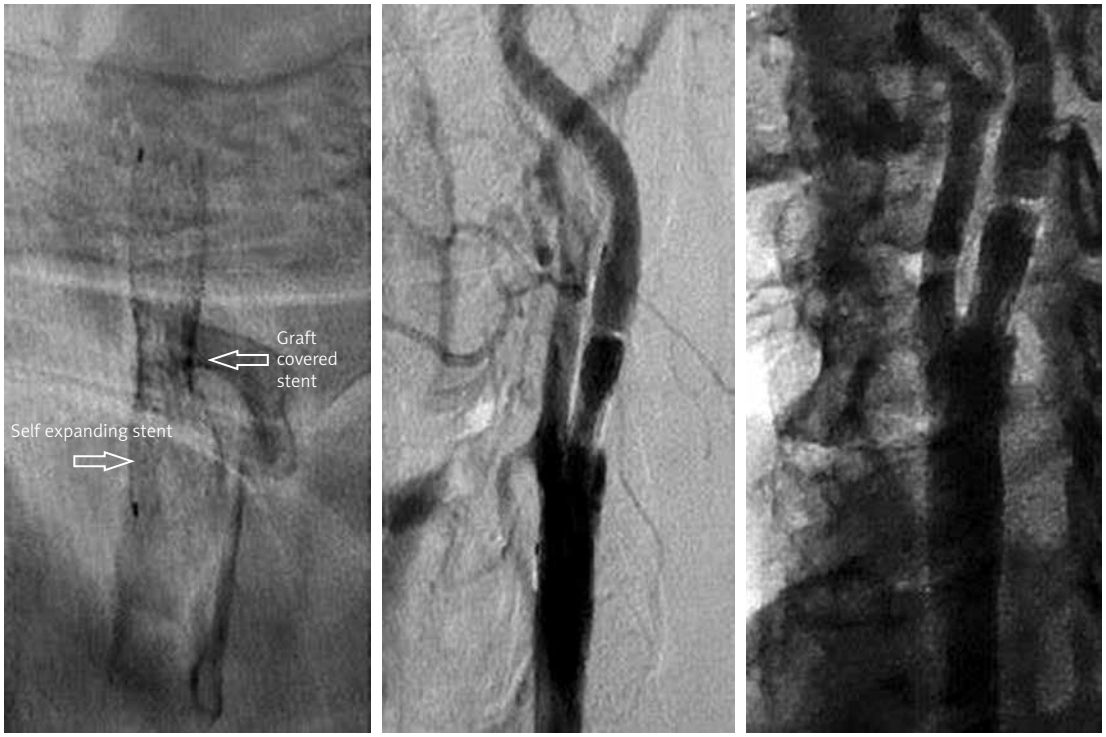

Figure 1. Digital subtraction angiography showed 99% in-stent restenosis in the overleap segment of both stents

References

1. Tatli E, Barutcu A, Gazi E, Gunduz Y. Covered stents may provide extra protection during carotid artery stenting in high risk patients with an excessive thrombus burden. BMJ Case Rep 2013; 2013: pii: bcr2013010258.