Recurrent carotid in-stent restenosis coexisting with contralateral carotid artery occlusion.

P. Paluszek, P. Pieniazek, K. Dzierwa, M. Trystula
Department of Vascular Surgery and Endovascular Interventions, John Paul II Hospital, Krakow, Poland

Background:
In-stent restenosis after carotid artery stenting (CAS) occurs in 5-10% of patients. The optimal therapy of this patients remains unknown.

Conclusions:
The use of the drug-eluting self-expandable stent might be a very promising therapeutic option for treatment of patients with recurrent carotid in-stent restenosis.

Case:
We present 77-year-old woman with critical stenosis of right internal carotid artery (RICA).

The medical history included:
• left hemispheric stroke in 2005 due to the left internal carotid artery occlusion,
• left vertebral artery stenting in 2008,
• hypertension,
• hypercholesterolaemia,
• radioiodine therapy for thyroid cancer.

On Doppler ultrasound (DUS) RICA stenosis was confirmed (PSV: 3.9 m/s, EDV: 1.3 m/s).

In 2011 we performed CAS with the use of distal protection Emboshield NAV and Carotid Wallstent 7x30mm stent, postdilated to 4.5mm.

In 2013 asymptomatic in-stent restenosis with PSV of 5.1 m/s on routine DUS occurred. We performed reangioplasty procedure with the use of distal protection FilterWire EZ and paclitaxel-releasing balloon Freeway 5.0x20mm.

In 2016 another distal in-stent restenosis with PSV of 4.9 m/s was shown on routine DUS. Once again, we performed angioplasty with the use of distal protection FilterWire EZ. We decided to use sirolimus-eluting, self-apposing Stentys SES 3.5-4.5x27mm stent.

Due to distal edge dissection, we implanted another Stentys SES 3.5-4.5x17mm distally with a very good angiographic and clinical outcome.

Follow-up:
On the 6-month observation after the last procedure patient remained asymptomatic and DUS showed no evidence of in-stent restenosis.

Conclusions:
The use of the drug-eluting self-expandable stent might be a very promising therapeutic option for treatment of patients with recurrent carotid in-stent restenosis.