Dislocation of a bare metal stent from the left main coronary artery to the right internal carotid artery

Przemieszczenie stentu metalowego z lewej tętnicy wieńcowej do prawej tętnicy szyjnej

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Dislocation of a coronary stent to the peripheral arterial systems is a rare complication after percutaneous transluminal coronary angioplasty (PTCA), with an estimated incidence ranging from 0.9% to 8.4%. It may remain asymptomatic or cause acute ischaemia. We present a case of an asymptomatic migration of a bare metal stent (BMS) from the left main coronary artery (LMCA) to the right internal carotid artery (RICA), treated with carotid arteriotomy. A 67-year-old male was admitted to our department due to the presence of a foreign body in the RICA. Previously he underwent PTCA with implantation of BMS (Liberte 5.0 × 16 mm) into dissected LMCA. After four months he was scheduled for another PTCA, which revealed dislocation of the stent into RICA (Fig. 1). As a cardiologist failed to remove the stent during PTCA, the patient was referred to the tertiary cardiology ward in our hospital for further treatment. Endovascular removal of BMS was attempted in the next few days by a radiologist without success. A decision for surgical intervention was made and the patient was transferred once again to a new department. Four days later he underwent standard carotid arteriotomy. The BMS firmly attached to the RICA internal wall and protruding into the common carotid was fully exposed and totally excised (Fig. 2). The thrombotic material in the stent was scarce, probably due to the pharmacological therapy with two antiplatelet drugs. Postoperative course was uneventful and the patient was discharged home after three days. In the follow-up he remains well and in good condition. To the best of our knowledge the dislocation of BMS to RICA was not previously described in medical literature. The casuistic papers comment mainly on migration of drug-eluting stents to certain arteries such as external iliac, femoral, deep femoral, peroneal, and tibial artery. If symptoms of acute ischaemia occurred, the patients underwent endovascular or surgical procedure. Asymptomatic patients were observed. There were two described cases of dislocation to carotid arteries. The first one was asymptomatic, mimicking only carotid stenosis. Another one presented as acute thrombotic occlusion and cerebral infarction. Both patients underwent standard carotid thrombectomy. We believe that prompt extraction of migrated stents is mandatory in cases manifesting with acute ischaemia as well as in asymptomatic dislocations at the level of vessel bifurcations like femoral, brachial, and, above all, carotid. With great certainty, it prevents intimal injury, adherence to the internal wall, and thrombotic occlusion of the arteries.

Figure 1. Angiography revealing coronary stent in the right internal carotid artery

Figure 2. Intraoperative exposition of coronary stent in the right internal carotid artery

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