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STUDIUM PRZYPADKU / *CLINICAL VIGNETTE*

Successful conservative treatment of right common femoral artery dissection after closure with an Angio-Seal™ device

Zachowawcze leczenie dysekcji prawej tętnicy udowej wspólnej wywołanej założeniem zapinki naczyniowej Angio-Seal™

Artur Chmiel[1], Janusz Bieńkowski[1], Grzegorz Kołoczek[1], Wojciech Kreis[1], Katarzyna Mizia-Stec[2]

[1]Department of Cardiology Provincial Hospital, Rybnik, Poland
[2]1st Department of Cardiology, Medical University of Silesia, Katowice, Poland

A 49-year-old male patient was subjected to coronarography due to stable angina. Percutaneous coronary intervention of the right coronary artery with multiple stent implantations was performed. After the procedure, the 6 F sheath from right common femoral artery was removed using a collagen-based Angio-Seal™ closure device. The patient complained of temporary pain in the right groin after the procedure. He was discharged from hospital the next day. Immediately after the discharge, the patient noticed symptoms of intermittent claudication at a distance of 50–100 m. The patient was admitted to the vascular surgery ward where angio-computed tomography (CT) confirmed the right common femoral artery stenosis (Fig. 1). An ultrasound examination of the right femoral artery revealed severe stenosis of the vessel with the dissection of posterior wall that was caused by the bioabsorbable anchor of the closure device (Figs. 2, 3). Because of the recent multiple coronary stent implantations and dual antiplatelet therapy, the patient was discharged without surgery. Treatment of enoxaparin sodium in therapeutic doses was introduced. Over the next 4 months, the distance of intermittent claudication gradually increased. In subsequent ultrasound examinations, the grade of the stenosis was smaller, and after 4 months, the flow was normalised and the symptoms had spontaneously completely resolved (Fig. 4) According to the manufacturer, all of the components of the device (suture, collagen and anchor) are bioabsorbed within 60 to 90 days. Management of such complications is not well established. Surgical arteriotomy, endarterectomy and thrombectomy in the case of concomitant thrombus and reconstructions are being performed. This case shows that conservative treatment with watchful observation might be an option.

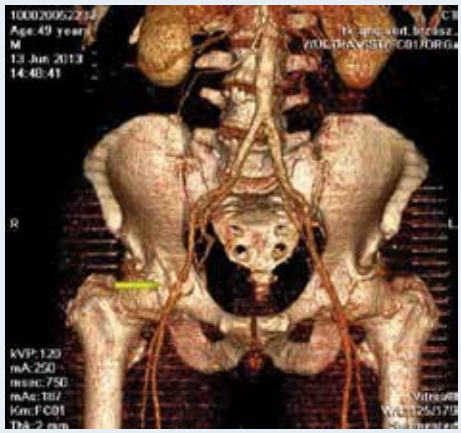

Figure 1. Angio-CT of the abdomen aorta, iliac and femoral arteries. Localisation of the stenosis

Figure 2. Colour Doppler ultrasound of the right common femoral artery stenosis. Components of the Angio-SealTM device and posterior wall dissection are visible: anchor: bioabsorbable co-polymer anchor placed against the inside of the vessel wall; collagen: placed on top of the arteriotomy in the tissue tract; suture: clinches the anchor and collagen together to form a secure seal

Figure 3. Pulse wave Doppler ultrasound of the right common femoral artery stenosis. Peak systolic velocity 510 cm/s, end diastolic velocity 82 cm/s

Figure 4. Pulse wave Doppler ultrasound of the right common femoral artery — flow normalisation after 4 months

Address for correspondence:
Dr Artur Chmiel, Department of Cardiology Provincial Hospital, ul. Energetyków 46, 43–430 Rybnik, Poland, e-mail: arturchmiel@wp.pl

Conflict of interest: *none declared*