

CARDIOVASCULAR FLASHLIGHT

doi:10.1093/eurheartj/ehp199

Online publish-ahead-of-print 1 June 2009

Twenty-two years angiographic and clinical follow-up of the first patient treated with intracoronary stent placement for acute vessel closure following percutaneous transluminal coronary angioplasty

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We report here the longest follow-up of a patient treated with intracoronary stent placement for acute vessel closure following conventional balloon angioplasty. The patient is a 52-year-old lady who developed abrupt left anterior descending coronary artery (LAD) closure shortly after double vessel percutaneous coronary intervention (PCI) for symptomatic stenoses to the right coronary artery (RCA) and LAD on 13 June 1986. Whereas the result of dilatation of the RCA was acceptable, the LAD lesion occluded while the patient was awaiting transfer to the ward. The occlusion was successfully re-opened by implantation of a self-expanding mesh stent without post-dilatation (WallStent, Medinvent, Lausanne, Switzerland) (Panel A). This was the first procedure of this kind in a fully awake human being performed in the University Hospital of Lausanne, CHUV (Switzerland). The immediate angiographic result was acceptable with a mild residual narrowing (Panel B). The long-term outcome was favourable, apart from re-stenosis of the RCA lesion (requiring stent placement at 3 months), and the patient remained asymptomatic for more than 22 years. This long, free of symptoms interval was certainly achieved because of aggressive management of risk factors (excellent control of hypertension, dyslipidaemia, and diabetes in addition with smoking cessation and daily exercise).

Control angiograms were performed at 6 months (Panel C) and at 9 years (Panel D). Recurrence of angina occurred for the first time in November 2008 and was attributed to a new stenosis of the distal circumflex artery (Panel E). A drug eluting stent was placed with good immediate result. The WallStent in the proximal RCA remained a patent without significant intimal proliferation or late restenosis (Panel F). This case illustrates that the combination of stent placement, lifestyle improvement, and medical treatment of risk factors can be very successful in the management of patient with ischaemic heart disease.

