Angioplasty with saphenous vein grafting carries a high associated risk of distal embolization or “no reflow” phenomenon, and periprocedural infarction. Two groups of devices can help prevent these complications: distal protection filters and thrombus aspiration catheters. The case presented illustrates the feasibility of simultaneous use of both approaches in thrombotic occlusion of an aortocoronary bypass graft.

A 54-year-old man with a history of coronary surgery 11 years previously, consisting of a left mammary graft to the left anterior descending artery and a saphenous graft to the obtuse marginal artery. On the basis of ST segment elevation from V4 to V6, he was referred for primary angioplasty. Following administration of a heparin bolus and abciximab, angiography was performed through a left radial approach, with an introducer and 6 French catheter. The culprit lesion was identified in the saphenous-to-marginal graft, which was occluded in the distal third. After advancing a guidewire with a system for distal embolization protection (Filter-Wire EZ™, Boston Scientific) (triangular arrow, Figure 1a) the bypass was recannulated, with persistence of the image of defined thrombus (central arrows, Figure 1a). An aspiration catheter for thrombotic material (Pronto™, Vascular Solutions) (Figure 1b) was advanced over the guidewire and a conventional 4.0 x 18 mm stent was implanted to treat the residual lesion (Figure 1c), with a favorable final angiographic outcome (Figure 1d). The procedure lasted a total of 28 min from puncture to withdrawal of the introducer.

Combined use of devices for thrombectomy and distal protection can be applied in cases involving a large amount of friable atherosclerotic or thrombotic material, as may occur in acute occlusion of venous grafts.

Joaquín Moxica, Marcelo Sanmartín, and Sofía Vázquez
Unidad de Cardiología Intervencionista, Medtec, Hospital do Mexoeiro, Vigo, Pontevedra, Spain.