Clinical vignette

doi:10.1093/eurheartj/ehm346

A dangerous arrow

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A 75-year-old man underwent yearly follow-up carotid Duplex scanning after carotid endarterectomy (CEA), performed
3 years ago, because of the presence of a large atherosclerotic plaque at the bifurcation of left common carotid artery with
severe stenosis (80%). A residual atheroma was present post-CEA with a small stenosis.

His medical history was notable for well-controlled hypertension, type 2 diabetes mellitus, smoking, and hypercholesterolaemia; his medications were simvastatin, aspirin, enalapril, and metformin. He was asymptomatic and there was a left carotid
bruit on examination.

Longitudinal carotid ultrasonography (Panel A) and power-Doppler imaging (Panel B) showed an ulcerated plaque below
the left CEA, strongly resembling an arrow, with severe stenosis of 90% confirmed by conventional angiography (Panel C; the
arrow indicates the severe stenosis and the arrowhead indicates the CEA).

Percutaneous transluminal angioplasty with stenting and cerebral protection using filter devices was successfully performed
(Panels D and E, arrows).

No neurological deficits or cranial nerve palsies were noted after the procedure, and at 6 months of follow-up, the patient was
asymptomatic, without signs of restenosis (Panel F).

Panel A. Longitudinal carotid ultrasonography showing the residual ulcerated plaque with severe 90% stenosis, below the
left CEA, strongly resembling an arrow.

Panel B. Longitudinal carotid power-Doppler imaging showing the narrowed left common carotid artery, strongly resembling an
arrow.

Panel C. Conventional digital subtraction angiography showing the severe stenosis (arrow) below the left CEA (arrowhead).

Panel D. Conventional digital subtraction angiography showing the stent (arrow) with normal blood flow after percutaneous transluminal
angioplasty.

Panel E. Conventional Angiography showing the stent (arrow) after percutaneous transluminal angioplasty.

Panel F. Longitudinal carotid power-Doppler imaging showing the stent with normal blood flow.

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