

Background: Calcified nodules (CNs) remain one of the most challenging lesion morphologies in percutaneous coronary intervention (PCI). Although CNs are well recognized in native coronary arteries, their occurrence within saphenous vein grafts (SVGs) is extremely rare.

Case: An 80-year-old man with hypertension and dyslipidemia underwent coronary artery bypass grafting (CABG) at 37 years of age (SVG-LAD and SVG-RCA), followed by redo CABG at 57 years (LITA-LAD and GEA-RCA). During the latter hospitalization, PCI with a bare-metal stent was performed for SVG-RCA because of GEA-RCA graft failure. At 75 years of age, he presented with worsening effort angina. Coronary angiography demonstrated a calcified nodule within the SVG, which was successfully treated with excimer laser coronary atherectomy (0.9- and 1.4-mm catheters) followed by a 4.0 × 20 mm drug-coated balloon (DCB). Five years later, he was readmitted with unstable angina. Coronary angiography again identified a recurrent calcified nodule within the SVG as the culprit lesion. The lesion was treated with rotational atherectomy using 1.5- and 2.0-mm burrs, followed by a 4.0 × 20 mm DCB, with a satisfactory angiographic result.

Conclusion: Calcified nodules remain a challenging lesion subset, particularly when they recur despite prior lesion modification. Calcified nodules arising within SVGs are exceptionally rare. This case highlights the feasibility of repeat plaque modification combined with a stent-less strategy using DCB and may provide valuable insights into the management of this uncommon lesion.