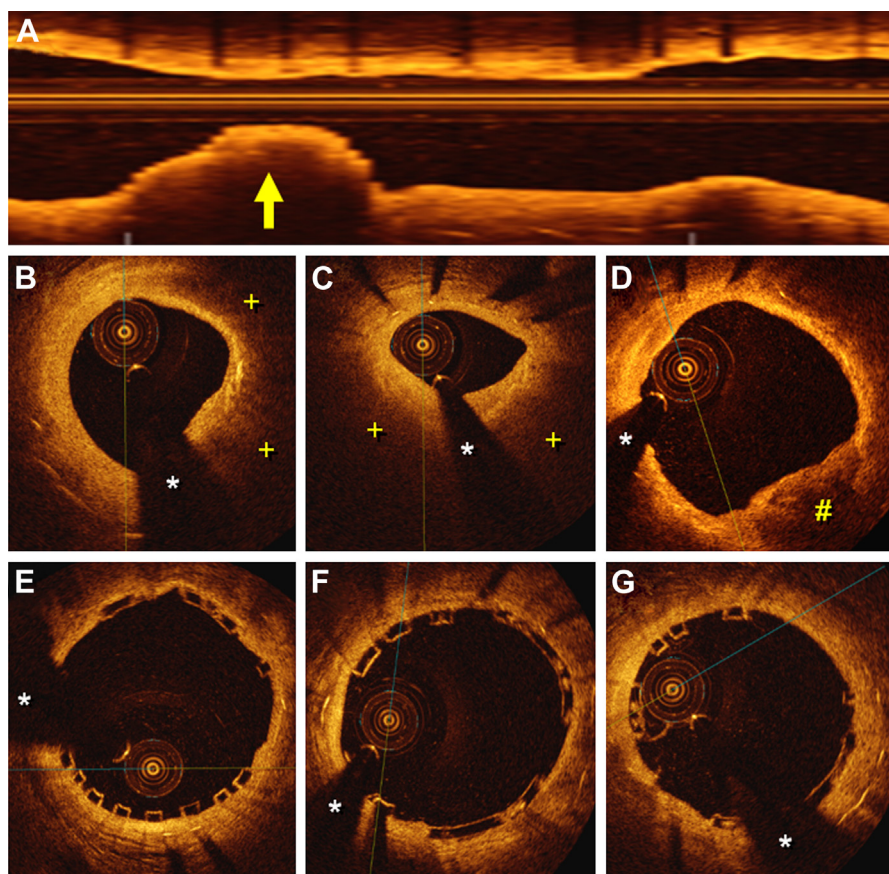


IMAGES IN CARDIOLOGY

Treatment of Coronary In-Stent Restenosis With Bioabsorbable Vascular Scaffolds



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Manuscript received
May 4, 2013;
accepted May 7, 2013.

A 77-year-old woman was admitted for angina 13 years after receiving a bare-metal stent in the left anterior descending coronary artery. Angiography showed in-stent restenosis (ISR). Optical coherence tomography (OCT) revealed a well-expanded stent with focal ISR (**arrow** in longitudinal display, **A**) and heterogeneous tissue, including lipid pools (+) and calcified segments (#), suggesting *neoatherosclerosis* (**B to D**) (wire-artifact [*]). Most underlying struts were not visible. A bioabsorbable vascular scaffold (BVS) was deployed and subsequently post-dilated at high pressures to remove a residual waist. Final OCT revealed a minimal lumen area of 8 mm². The classic “black box” BVS appearance (without shadowing) was identified, well apposed on residual intrastent tissue, overlying the bright artifacts (sharp shadows) of the underlying metallic struts (**E to G**). The therapy of choice for *neoatherosclerosis* remains unknown. BVS may emerge as an attractive therapeutic strategy for selected patients with ISR. In this setting, BVS avoids the need for an additional metal layer on the vessel wall. OCT provides unique insights on this novel therapeutic strategy.