

## IMAGES IN INTERVENTION

# Serial 2- and 3-Dimensional Visualization of Side Branch Jailing After Metallic Stent Implantation

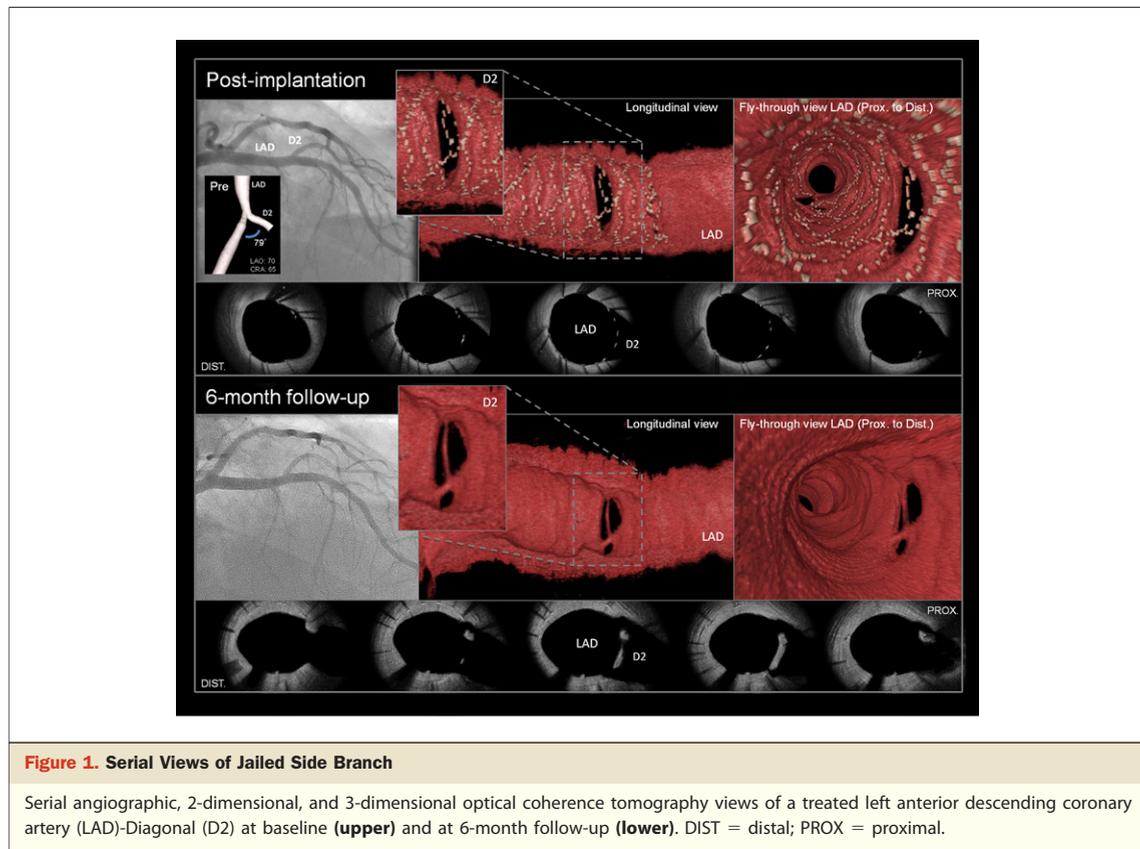
## To Kiss or Not to Kiss . . . ?

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A moderate mid left anterior descending coronary artery (LAD) (diagonal disease [MEDINA 1, 1, 0]) was direct stented with a  $3.0 \times 18$ -mm bare metal stent. No final kissing balloon post-dilation

(FKBPD) was undertaken. Offline 3-dimensional (3D) optical coherence tomography (OCT) demonstrated the side-branch (SideB) opening to be divided into 3 compartments and to be fully visible



**Figure 1. Serial Views of Jailed Side Branch**

Serial angiographic, 2-dimensional, and 3-dimensional optical coherence tomography views of a treated left anterior descending coronary artery (LAD)-Diagonal (D2) at baseline (**upper**) and at 6-month follow-up (**lower**). DIST = distal; PROX = proximal.

when viewed perpendicular to the vessel wall in the longitudinal 3D-OCT views, consistent with a “perpendicular” bifurcation (SideB angle: 79°) (Fig. 1, upper images) (1). Six-month scheduled angiographic follow-up demonstrated no significant angiographic change and neointimal tissue after the course of the jailed SideB struts (Fig. 1, lower images).

Although the randomized Nordic-Baltic Bifurcation Study III demonstrated that main-branch stenting strategies with and without FKBPD were associated with similar clinical outcomes at 6 months, a reduced incidence of angiographic SideB (re)stenosis was apparent with FKBPD (2). The present case highlights the mechanism of potential SideB compromise in that the jailed SideB struts might potentially act as a focus for excessive neointima formation. One of the potential future difficulties of SideB jailing is that subsequent reintervention in the SideB might prove difficult, particularly if the coronary wire is passed into a small compartment at the SideB opening. In addition a potential role of online 3D-OCT is the passage of the

coronary wire into the distal cell of jailed SideB struts to facilitate clearance of jailed struts during FKBPD (1,3).

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