

Case Write-up:- Treatment of Bifurcation Lesions with SafeCut Balloon

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Patient Information & Coronary Angiogram Findings

Subject: 72 year old male patient with coronary risk factors of hyperlipidemia. Exertional angina.
Left Main: Normal
LAD: 90% stenosis at Mid-LAD & 80% stenosis at ostial LAD/Diagonal (LADDI) (bifurcating lesions)
LCX: Normal
RCA: Normal

PCI Devices Used

Guiding Catheter: 7F Saffron NM JL4/ST (Neich Medical)
Guidewire: 2 units of BMW (Guidant ACS)
Balloon: 2.5 x 10 mm SafeCut Balloon (Neich Medical)
Stent: Constant (Neich Medical)

Approach

2 BMW guidewires were inserted - one in the LAD and one in LADDI

PTCA/Stenting Procedure

The SafeCut balloon was used to dilate the mid-LAD 90% stenosed lesion - it crossed easily, showing that it has a low profile and can cross very tight lesions just like a conventional balloon. After successful dilatation of the mid LAD lesion, the same SafeCut balloon was used to dilate the 80% stenosed LADDI lesion. Again, there was no resistance.

After successful dilatation of both the mid LAD & LADDI lesions, a Constant stent was deployed across the mid LAD lesion with good result. Due to some plaque shift into the ostium of the LADDI, the initial SafeCut balloon was used to cross the LAD stent into the LADDI (there was slight resistance but the SafeCut balloon was able to cross the stent struts into the LADDI with slight deep-throating of the guiding catheter - it was surprising that the SafeCut balloon was able to cross the stent without much resistance) and the ostial LADDI was again dilated with satisfactory result.



Procedural Angiograms in Sequence

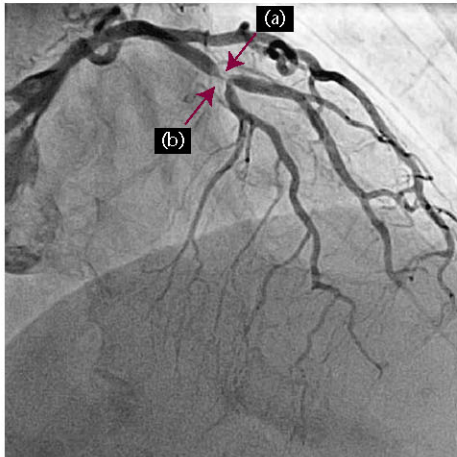


Fig.1 - Pre-angiogram of stenosed (a) mid-LAD (90%) and (b) Diagonal branch (80%)

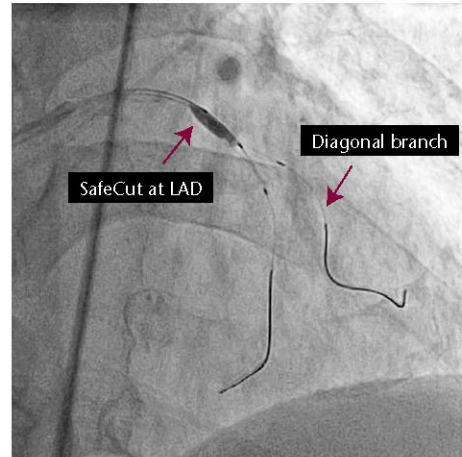


Fig.2 - Balloon inflation at mid-LAD using SafeCut after guidewire positioning in LAD and LADDI

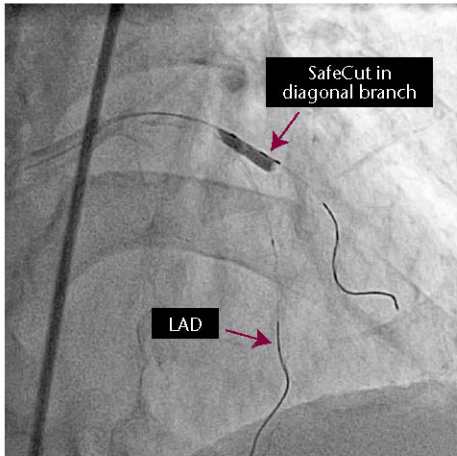


Fig.3 - Balloon inflation at Diagonal branch using the same SafeCut balloon

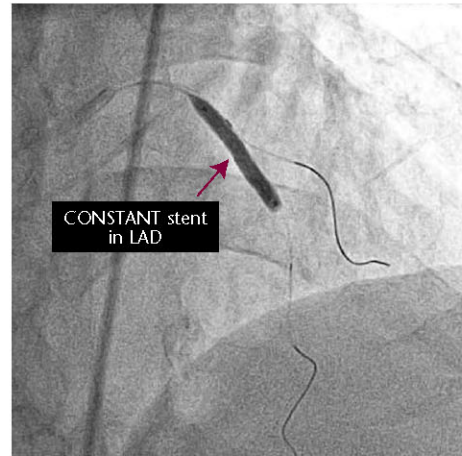


Fig.4 - Stent across the mid-LAD lesion

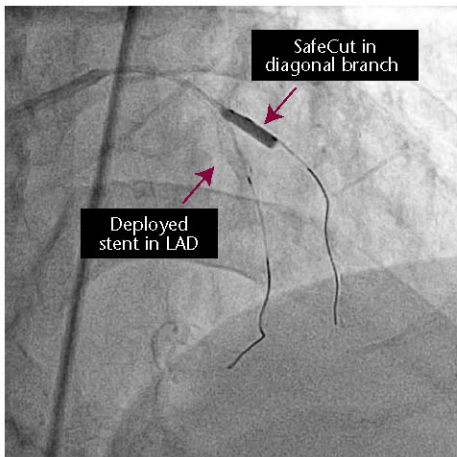


Fig.5 - Opening of stent strut using SafeCut after re-wiring guidewire through deployed stent



Fig.6 - Post-angiogram showing satisfactory results