Case Report: Chocolate® PTCA Balloon Catheter for pre-dilatation of an occluded right coronary artery.

A case-based discussion of the use of Chocolate PTCA Balloon Catheter in complex cases
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Incomplete stent expansion and malapposed stent struts are a predictor of subacute and late stent thrombosis.

Appropriate lesion preparation prior to stent implantation is necessary to assure complete stent expansion and stent strut apposition. This is of particular importance in challenging lesions, in particular those with calcific plaque.

The goal of the pre-dilatation is to obtain optimal luminal diameter prior to stenting without causing any significant dissections. There are few devices available that are specifically designed to facilitate predictable dilatation while minimizing the risk of flow-limiting dissection.

Patient and Disease State
• 68 year old male with one de novo lesion in RCA.
• History of stable angina and no previous interventions.
• RCA showed moderate tortuosity. The lesion was moderately calcified (Type B) (Figure 1).

Procedural Steps
• Vascular access through femoral artery using 6F sheath and guide catheter. An EBU3.5 (Medtronic) and the 0.014” Runthrough guidewire (Terumo) used to access RCA.
• Treatment strategy: implant a DES to cover the lesion.
• Due to the moderate calcification and to achieve optimal lesion preparation prior to stenting, a 2.5mm x 20mm Chocolate PTCA Balloon Catheter was used to predilate the lesion.
• One inflation at 14 ATM for 10 seconds (Figure 2).
• No accessories were required to facilitate the use of the Chocolate PTCA balloon catheter.
• Following predilatation with Chocolate PTCA (Figure 3), a Promus Premier drug eluting stent (Boston Scientific) was deployed to cover the lesion.
• The 2.5mm x 16mm Promus Premier stent was inflated to 15 ATM for 17 seconds.
Results

- The final angiographic result demonstrated satisfactory restoration of the artery flow without dissection.

Chocolate offers predictable luminal gain while minimizing the risk of flow-limiting dissection*. Chocolate balloon inflation is uniquely:

- Predictable
- Controlled
- Uniform

Unique nitinol constraining structure offers key benefits:

- Constraining structure
  - Protects the vessel from shear stress caused by balloon inflation
- Dilatation pillows
  - Vessel dilatation without cutting or scoring
- Plaque channeling grooves
  - Stress relief zones

*Data on file at TriReme Medical. Based on MOA for the Chocolate and FEA analysis. Clinical data not available at this time.

**Physician statement.