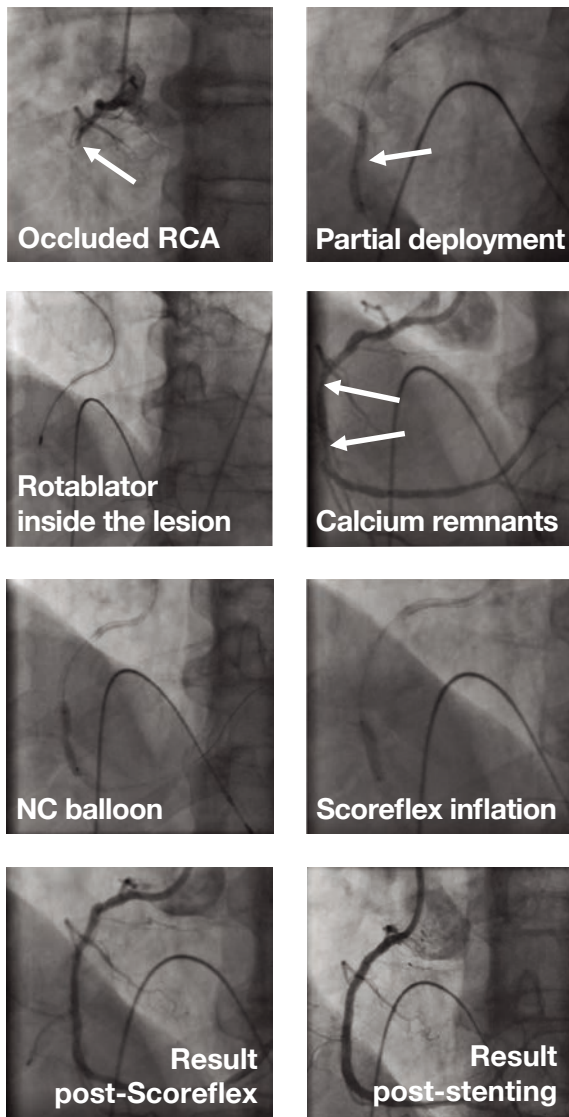


Optimal lesion preparation in calcified lesions using scoring balloon after rotablation

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Background:

Rotational atherectomy (rotablation) has long been a customary treatment strategy for highly calcified lesions prior to stenting. Due to limitation in burr sizes, however, use of larger balloons for further balloon preparation is often required. On the other hand, use of conventional balloons may not be sufficient in achieving optimal end results by means of maximum Minimal Lumen Diameter (MLD) after stent implantation.



Case Details:

- 75 year-old patient with inferior STEMI
- Angiogram revealed an occluded RCA
- Three failed attempts using a 2.5 x 15 mm non-compliant (NC) balloon due to severity of the calcification. Final balloon inflation resulted in balloon burst at 24 atm

Alternative Strategy:

- Use of a 1.5 mm Rotablator burr (Boston Scientific, USA)
- Use of a 2.75 x 20 mm NC balloon for further upsizing but balloon ruptured at 30 atm without fully opening the vessel
- A 2.5 x 15 mm Scoreflex (OrbusNeich, The Netherlands) successfully modified the calcified plaque with a high pressure dilatation, followed by successful stenting of 2 DES

Result:

Post-stenting angiogram showed excellent results with a fully opened vessel after placement of a 3.0 x 22 mm and 3.0 x 20 mm DES, both deployed at 16 atm.

Conclusions:

Use of Scoreflex as an adjunctive treatment with rotablation is effective in modifying highly calcified plaque and provides optimal results after final stent deployment.