

1169 **Successful percutaneous revascularization of chronic total occluded lesion with severe calcification
using rota-lithotripsy**

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Calcification within chronic total occlusions is strongly associated with worse outcomes. Rota-lithotripsy-a marriage of rotational atherectomy and intravascular lithotripsy-has recently been introduced to clinical practice as a novel therapeutic option.

A 72-year-old male was referred to our hospital from another institution for further management of a chronic total occlusion in the right coronary artery with severe calcification. The patient had a history of previous myocardial infarction, and coronary angiography at the referring hospital revealed a CTO of the mid RCA with J-CTO score of 3, with severe calcification, bending, and lesion length exceeding 20mm.

PCI was performed via the femoral approach. Fortunately, an antegrade wire escalation strategy successfully achieved lesion crossing. However, despite multiple attempts, device delivery failed due to severe calcification. Therefore, rotational atherectomy was performed with a 1.5mm burr, followed by upsizing to a 2.0mm burr. Although lesion modification allowed balloon advancement, balloon inflation showed persistent indentation, suggesting residual deep calcification. To overcome this, intravascular lithotripsy was performed using a Shockwave balloon. The indentation resolved, and stents were successfully deployed with full expansion. Final angiography showed TIMI 3 flow without complications.

The combination of RA and IVL offers a synergistic approach, targeting both superficial and deep calcification to optimize lesion preparation prior to stenting.