**ROTATIONAL ATHERECTOMY FOR CALCIFIED LESIONS DURING ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION**

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**Background**: Rotational atherectomy (RA) has traditionally been contraindicated during ST elevation myocardial infarction (STEMI) due to fear of dissecting inflamed intima. To date, there are only a few isolated case reports. We present a series of RA required for calcified lesions during STEMI.

**Case Series**

**Pt 1**: 71M smoker admitted with right coronary STEMI. After predilation, intravascular ultrasound (IVUS) failed to pass a 360-degree calcified lesion. RA performed to allow stent passage. Final angiography revealed 0% residual stenosis.

**Pt 2:** 64M diabetic admitted with left anterior descending STEMI. After predilation, stent failed to pass 360-degree calcified lesion. RA performed to allow stent passage. Final angiography revealed 0% residual stenosis.

**Pt 3:** 61F with end-stage renal disease admitted with right coronary STEMI. After predilation, non-compliant balloon failed to pass 360-degree calcified lesion. RA performed to allow stent passage. Final angiography revealed 10% residual stenosis.

**Decision-Making**: In all 3 patients, equipment failed to pass, and IVUS demonstrated 360-degree calcification (Figure 1). Despite “official” contraindication in STEMI, RA was performed without complication.

**Conclusion**: For STEMI in severely calcified lesions, RA may be safe and necessary to deliver and expand stents. Larger studies are required to clarify the safety of RA in this population.



**Figure 1:** Representative pre-PCI angiograms, IVUS images showing 360-degree calcification, post-PCI angiograms along with a comparison table illustrating the similarities and differences of each individual patient.