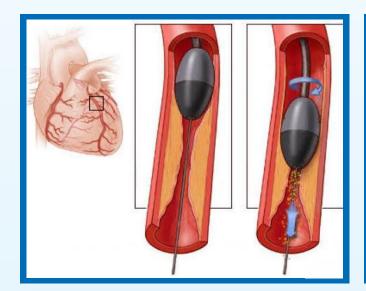
CHALLENGING CASE OF ROTA ABLATION IN ACUTE CORONARY SYNDROME

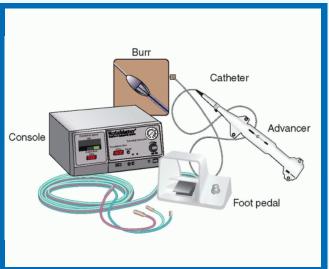




A CASE STUDY

- Elderly patient was admitted at Inamdar hospital with ACS & Heart failure. The Patient was obese with conditions like diabetes mellitus & hypertension. He was also a heavy smoker.
- Rotational atherectomy (RA) is an atheroablative technology that enables percutaneous coronary intervention for complex, calcified coronary lesions. RA works on the principle of differential cutting' and preferentially ablates hard, inelastic, Calcified plaque. The objective of RA use has evolved from plaque debulking to plaque modification to enable balloon angioplasty and optimal stent expansion. The clinical experience over the past 30 years has informed the current best practices for RA with use of smaller burr sizes, short ablation runs a 'pecking' motion, and avoidance of sudden decelerations. This has led to significant improvements in procedural safety and a reduced rate of associated complications
- Coronary angiogram was done after initial medical stabilization which showed severe Calcified Coronary Vessel. Critical Disease In LAD AND RCA.





ROTA ABLATION

- Traditional teaching & guidelines rota ablation is contraindicated in patient of myocardial infarction. But in our case, without rota ablation it was impossible to do the case.
- Heavily Calcified lesions are difficult to dilate adequately with balloon angioplasty, even with

high-pressure ination. Angioplasty balloons are prone to asymmetric expansion and dog boning around the site of severe calcification, increasing the risk of coronary dissection and perforation. Calcified plaques impede delivery of angioplasty balloons and stents and increase the risk of stent under expansion and malapposition





Vigorous advancement of drug-eluting stents (DES) across heavily Calcified lesions also poses a risk of damage to the drug coating. Moreover, there might be





inadequate diusion of the drug through extensive calcium arcs to the subintima limiting the effectiveness of the DES. Therefore, even in the contemporary era, moderate to severe lesion calcification is associated with a higher rate of major adverse cardiovascular events (MACE), target lesion revascularization (TLR) and target vessel revascularization at followup for patients with a DES. This is likely attributable to both lesion- and patient-specific factors, since significant coronary calcification is more prevalent with advanced age, renal insufficiency, diabetes and previous coronary bypass surgery (CABG), which are independent predictors of adverse ischemic events

AFTER SURGERY



- We did PTCA to LAD with 2 drug elluting stents with 1.5 mm burr size rota ablation with stand by of IABP & cutting balloons & surgical standby.
- The Patient is doing well today with ROTA ablation and is able to live a healthy life.

ABOUT DR. VIVEK GAIKWAD, CARDIOLOGIST



DR. VIVEK GAIKWAD MBBS, DNB - GENERAL MEDICINE, **DNB - CARDIOLOGY, DTCD, MNAMS** 12 Years Experience as a Cardiologist

Dr. Vivek Gaikwad completed his MBBS from Mimer college, Pune, DNB (General medicine) from Poona hospital & research center, Pune. DNB cardiology from Ruby hall clinic, Pune. He has done 10,000 plus angiographies and angioplasties including PAMI /ROTA He has more than 12 years experience as an expert in cardiac medicine and has worked as HOD in cardiology at the top hospitals in India.

