

A case of orbital atherectomy under IABP support for unprotected left main ostial lesion with complicated by RCA occlusion and left ventricular dysfunction

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A 79-year-old woman on maintenance dialysis due to chronic renal failure. She had a history of breast cancer with lung metastases, but the metastases were well controlled by chemotherapy. Her left ventricular ejection fraction is 26% with diffuse left ventricular wall hypokinesis, probably due to cancer therapy-related cardiac dysfunction (CTRCD). The patient complained of chest discomfort and hypotension during dialysis, and CAG was performed. Despite using a 4F catheter, it wedged into the LCA was unavoidable. CAG revealed 90% stenosis at the ostial LMT and occlusion at RCA#2. Surgical consultation deemed CABG infeasible due to her frailty. After explaining the procedural risks, the patient consented to PCI for LMT revascularization. IVUS showed concentric, severely calcified nodule in LMT, necessitating pullback ablation using OAS. After debulking the lesion, CoCr-EES was deployed in the LMT-LAD, achieving optimal dilatation. However subsequent angiography revealed a new contrast defect in mid LAD. It was assumed to be a part of calcified nodule migrated from LMT. After protecting D2 branch with jailed balloon technique, a PrCr-BP-EES was deployed in mid LAD, restoring sufficient LAD blood flow.

We report a case of OAS for an unprotected LMT calcified lesion with RCA occlusion, supplemented by a literature review.