Treatment of ectatic coronary arteries in acute coronary syndromes

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Introduction: Coronary artery ectasia (CAE) is a focal or diffuse dilatation of an epicardial coronary artery, more than 1.5 times the normal adjacent segment. Its prevalence ranges between 0.3 and 5% of patients undergoing coronary angiography. These changes are mostly asymptomatic, some patients present as stabile effort angina and minority develop acute coronary syndrome. Percutaneous coronary interventions (PCI) is a treatment of choice in acute coronary syndrome but it presents a major challenge with possible unpredictable complications².

Case report: We present a case of 78-year-old male, presented with inferior ST elevation myocardial infarction. Right coronary artery (RCA) was ectatic and occluded distally. We performed balloon dilatation and thromboaspiration with Export catheter to establish TIMI 3 flow, and a residual stenosis of 70% with high thrombotic burden remain, so we decided to treat the patient with triple anticoagulant therapy initially and postpone stent implantation because of possible no flow phenomenon. After one month we did the angiogram which showed resolution of thrombus and we put the large drug eluting stent 5.0/22mm, postdilated up to 6mm with a good apposition.

Conclusion: Percutaneous coronary interventions in ectatic / aneurismal vessels carry a high risk of complications, primarily a no-reflow phenomenon. No-reflow is common in patients with acute coronary syndrome. Restoration of TIMI 3 flow can be achieved with thrombectomy or balloon dilatation. In case of large aneurysm consider initial medicament treatment with triple therapy and postpone definite PCI with stent implantation to avoid distal embolization and no reflow phenomenon.

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