SEVERE ANUERYSMAL DILATION OF ALL THREE CORONARY ARTERIES WITH EMBOLIZATION CAUSING STEMI: A MANAGEMENT DILEMMA

Poster Contributions
Poster Hall B1
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Session Title: FIT Clinical Decision Making: Ischemic Heart Disease
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Authors: Christopher Rowan, University of New Mexico, Albuquerque, NM, USA

Background: Coronary artery aneurysms are often found during cardiac catheterization, however, severe dilation of the three main coronary arteries is often found only in children with Kawasaki’s Disease. The long and short term management of partially thrombosed aneurysms is unknown.

Case: An 80 y/o male presented to the ER with chest pain and an EKG concerning for acute posterior ST elevation MI. He was hypotensive and tachycardic and emergently taken to the cardiac catheterization laboratory where he was noted to have severe aneurysms of all three coronary arteries with a heavy burden of thrombus in his left anterior descending, left circumflex and right coronary artery. A balloon pump could not be placed due to aortic and iliac artery tortuosity. He was deemed not a surgical revascularization candidate. He further deteriorated and required increasing doses of pressors.

Decision Making: After consultation among interventional cardiology, cardiothoracic surgery and the family, intracoronary alteplase was delivered in 10 mg boluses, three times. His hemodynamics improved and he was weaned from pressors. His troponin peaked at 22. An echocardiogram the next day showed an EF of 50-55%. The patient was discharged on aspirin and clopidogrel. At follow up 18 months later the patient remains symptom free.

Conclusion: Aneurysms of all three coronary arteries with thrombosis and shock is extremely rare. Intra coronary alteplase can be considered but there is a lack of data to guide dose and timing.

Figure 1: Initial diagnostic films showing A,B) large thrombus in the LAD, first diagonal and C) right coronary artery with complete thrombosis of the left circumflex. D) Tortuosity of the aorta and iliac arteries preventing placement of an intra aortic balloon pump.