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109814

MODALITY: E-POSTER YOUNG RESEARCHER - CASE REPORT
CATEGORY: HEMODYNAMICS AND INTERVENTIONAL CARDIOLOGY

TITLE: TRANSCATHETER EDGE-TO-EDGE MITRAL VALVE REPAIR TO IMPROVE HEART TRANSPLANT CANDIDACY IN WORSENING PULMONARY HYPERTENSION: A CASE REPORT.

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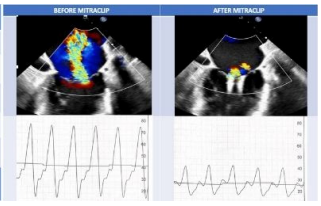
BACKGROUND: Transcatheter edge-to-edge mitral valve repair (TEER) has been utilized as a potential therapeutic strategy in selected patients with advanced heart failure. According to a multicenter retrospective registry, TEER may promote clinical improvement and pulmonary hypertension relief as bridge to transplantation or to candidancy. REPORT: A 57-year-old male with ischemic cardiomyopathy and recently worsened severe functional mitral regurgitation (MR) was admitted with advanced heart failure and listed for transplant. Clinical status worsening, with intravenous inotropic support increases and temporary mechanical circulatory support followed. Hemodynamic assessments showed heart failure progression with fixed severe pulmonary hypertension and remarkably poor cardiac performance. Transplant was then deemed to be of high risk, and the patient was inactivated on the waiting list. TEER was considered as a "bridge to candidancy" and it was carried with the implantation of 2 XTw MitraClip® (Abbott Vascular) devices. Remarkable reduction on both MR severity and left atrial V-wave pressure were achieved. Functional and hemodynamic status dramatically improved and the patient was reactivated on the heart transplant waiting list at 30-day follow-up. CONCLUSION: TEER may be a feasible option in selected heart transplant candidates to improve severe pulmonary hypertension.

	Outpatient Clinics	Admission	After Mitraclip (45 days)
RAP (mmHg)	7	9	3
PAP (mmHg)	26/12/17	71/35/47	47/27/34
PAWP (mmHg)	12	18	23
CI (L/min/m²)	2.6	1.7	2.65
PVR (Wood units)	0.7	6.9	2.37

RAP = Right atrium pressure; PAP = Pulmonary artery pressure (systolic/ diastolic/ mean); PAWP = Pulmonary artery wedge pressure; CI = Cardiac index; PVR = Pulmonary vascular resistance;



109858

MODALITY: E-POSTER YOUNG RESEARCHER - CASE REPORT
CATEGORY: HEMODYNAMICS AND INTERVENTIONAL CARDIOLOGY

TITLE: VALVE-IN-VALVE MITRAL IN PATIENT WITH THROMBUS IN LEFT ATRIAL APPENDAGE: THE IMPORTANCE OF BRAIN PROTECTION WITH SENTINEL™ DEVICE AND APPENDAGE OCCLUSION WITH WATCHMAN™ PROSTHESIS IN THE SAME PROCEDURE.

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Introduction: Rheumatic valve disease still is a prevalent condition in our country. Even when young, affected patients evolve the need of mitral valve replacement. Subsequent valve dysfunctions, predominantly in mitral valves, generate structural and pathological consequences, primary or secundary. Thromboembolic phenomenons and the increased operative risk in the classical surgical approaches confers a higher risk of morbidity and mortality to those patients. Modern strategies and devices for percutaneous treatment emerge as an option for a better approach. Case description: 78 years old, female, with hypertension and permanent atrial fibrillation. Evolves with worsening of functional class, signs of congestion, requiring hospital admission and intravenous diuretic therapy. This patient have a history of biological mitral valve replacement due to rheumatic valve disease. The first one was in 1968 and the second one was in 2000. She had a subarachnoid hemorrhage event in 2020. Evolves with worsening functional class, with signs of system congestion, requiring the use of intravenous diuretic therapy. After clinical stabilization, a transesophageal echocardiogram was performed, revealing an LA enlargement and a severe degeneration of the biological mitral prothesis with calcified and poorly mobile bases including a eversion of one of these leaflets into the left atrium, causing a severe mitral regurgitation, with a transprosthetic gradient. maximum 21 mmHg and average 9 mmHg , Peak Velocity 2.3 m/s, PHT 179 ms, AEO 1 cm², and presence of thrombus in the left atrium Due high surgical risk, percutaneous treatment was chosen with a VIV - "Valve in Valve" strategy preceded by central nervous system protection with the Sentinel™ device on the brachiouscefalic trunk and the left internal carotid beside Left Atrial Appendage with the watchman™ flex. Conclusion: The treatment of valve degeneration in elderly patients with previous biological valve replacement is still challenging, with the advent of percutaneous treatment (Valve-in-valve), which has brought new perspectives to those patients. The use of devices such as sentinel™ and watchman™ help to prevent one of the main complications, which is embolism to the central nervous system. References: Little SH, Bapat V, Blanke P, Guerrero M, Rajagopal V, Siegel R. Imaging Guidance for Transcatheter Mitral Valve Intervention on Prosthetic Valves, Rings, and Annular Calcification. JACC Cardiovasc Imaging. 20

109870

MODALITY: E-POSTER YOUNG RESEARCHER - CASE REPORT
CATEGORY: CARDIOVASCULAR SURGERY

TITLE: ACUTE PERICARDITIS AND PERICARDIAL EFFUSION AFTER COVID-19 INFECTION

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INTRODUCTION: COVID-19 infection has a wide spectrum of clinical presentations, including cardiovascular, including myocarditis and pericarditis. The prevalence and events associated with this condition still remain under analysis, as well as the repercussion of such complications after the viral infection. CASE DESCRIPTION: 74-year-old female patient, former smoker, bilateral carotid stenosis without hemodynamic repercussions, rheumatoid arthritis and diagnosis of viral pneumonia due to COVID-19 in January 2022. She was admitted, in March 2022, to a referral center in cardiovascular diseases, with a clinical picture of chest pain that worsened during inspiration with 2 months of evolution. Laboratory measurements of troponin and D-dimer within normal limits. Admission electrocardiogram suggestive of pericarditis. Transthoracic echocardiogram (TTECT) revealed preserved biventricular function and pericardial effusion with a greater depth of 11.0 mm. Despite the optimized clinical treatment for the pericarditis, the patient evolved with clinical worsening and rapid evolution of the pericardial effusion initially evident, with a 30.0 mm blade and signs of hemodynamic repercussion, requiring urgent drainage. On the 1st postoperative day in the intensive care unit, the patient evolved with severe acute biventricular dysfunction and need for vasoactive drugs, without response to the established clinical measures, progressing to death. CONCLUSION: The prevalence of underlying pericarditis and pericardial effusion in patients with COVID-19, as well as its clinical significance remains the subject of clinical research. Thus, knowing risk factors and the pathophysiology of cardiovascular complications related to COVID-19 are sine qua non conditions for understanding the clinical presentation, prognosis and therapeutic management.

109879

MODALITY: E-POSTER YOUNG RESEARCHER - CASE REPORT
CATEGORY: HEMODYNAMICS AND INTERVENTIONAL CARDIOLOGY

TITLE: A UNIQUE CASE OF STENT KINKING

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Patient is a 62 year old male with past medical history of tobacco abuse who had presented with abrupt onset of pain and paralysis in his right arm. Of significance, he had suffered a motor vehicle accident two years prior but had refused medical treatment for the diagnosed right clavicle fracture at that time. On physical examination, patient had ischemic discoloration of his right arm and forearm and was noted to have absent pulses in that arm. CT angiogram of the right upper extremity was performed which showed an occlusion at the thoracic outlet with another obstruction down at the bifurcation of the distal brachial artery at about the level of the antecubital fossa. Embolectomy was initially performed. A EV3 Protege self-expanding stent was deployed within the distal subclavian artery and proximal axillary artery. The stent was postdilated with a EV3 EverCross balloon. Post stenting angiogram did not show any significant residual stenosis. There were no immediate post operative complications. To further investigate etiology of patient's arterial thrombosis, transesophageal echocardiogram was performed that was negative for intracardiac thrombus, however atheromatous plaque lesion was present in aorta and CT angiogram of the chest was recommended for further characterization. CT angiogram of the chest showed new right subclavian artery stent placement with resolution of previous occlusion. Report of CT scan read as such: Stent is patent but buckled proximally with luminal narrowing in the area of buckling. He subsequently underwent examination of the right arm and shoulder under fluoroscopy and showed that the distal segment of the clavicle (due to untreated displaced fracture) impinged on the stent with motion. Interestingly enough, with patient's arm hyperadducted, there was impingement on the subclavian stent, and patient would actually experience numbness in his right arm. As a result, patient underwent operation by orthopedics for right clavicle open reduction internal fixation, and his symptoms of right arm paresthesia was resolved as his stent remained patent without kinking. Conclusions: The incidence of subclavian artery thrombosis is quite uncommon, although this risk is increased with risk factors such as peripheral vascular disease, obesity, and diabetes mellitus. Stent impingement should be on the differential in a patient that is admitting to motional symptoms that is related to the regional blood supply.