to COVID-19+ HRV RMSSD, SDNN, and HRV Triangular index.

CONCLUSION: Autonomic dysfunction is present in COVID-19 patients. HRV can be used for early detection and prediction of COVID-19 allowing physicians to intervene earlier to reduce its morbidity and mortality.

Do Surgical Outcomes for Ascending Aortic Dissection Vary Based on Arterial Cannulation?
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INTRODUCTION: The optimal method for arterial cannulation in acute aortic dissection surgical repair remains controversial. The aim of this study was to compare central ascending aortic, axillary, and femoral cannulation in patients who underwent surgery for acute ascending aortic dissection.

METHODS: A retrospective study was performed on 111 patients who underwent surgical repair for a Type A dissection between January 1st, 2011 and September 11th, 2019 at a single institution. A total of 116 arterial cannulations were performed. These consisted of 83 (71.6%) femoral, 16 (13.8%) ascending aorta, and 17 (14.7%) axillary cannulations. Deep hypothermic circulatory arrest was used in all the patients. Rates of postoperative complications and mortality were reported.

RESULTS: The mortality rate for all patients undergoing repair of the Type A dissections was 26.1% (29/111), with no difference observed between those undergoing femoral, axillary, ascending aorta cannulations (26.8%, 20.0%, 28.6%, respectively; p=0.88). None of the mortalities identified were directly attributable to the cannulation approach in each case. There was no statistically significant difference in rates of malperfusion directly due to cannulation strategy (1.2% femoral, 5.8% axillary, 6.3% ascending aorta; p=0.19). Similarly, there was no difference in bleeding rates at the site of cannulation (1.2% femoral, 0% axillary, 0% ascending aorta; p=1).

CONCLUSION: Despite the recent shift away from femoral cannulation, the results of the study show that all 3 cannulation techniques are safe and produce excellent results for establishing cardiopulmonary bypass. The concerns for malperfusion syndrome related to femoral cannulation were not seen.

Systematic Review of Graft Patency after Robotic Assisted Coronary Artery Bypass Grafting Surgery
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INTRODUCTION: We compared mortality, post MI LV function, rehospitalization for CHF or ICD in patients undergoing emergency bypass surgery (CABG); exposed to hyperoxia vs gradual oxygen.

METHODS: We reviewed records of emergency CABG over an eight year period. After 2010 we instituted a gradual oxygenation (GO group) protocol in a non-randomized manner. Patients were excluded who presented electively. End-points were operative mortality, deterioration of left ventricular ejection fraction (LVEF) as assessed by echocardiography (echo) and readmission for or ambulatory treatment of congestive heart failure or insertion of an implantable cardioverter defibrillator (ICD).

RESULTS: 64 patients (23 in the HO group and 41 in the GO group) were included. Unadjusted operative mortality and in those with shock was lower in the GO group (0/41 0% vs 3/23 13%; p=0.0425) and (0/9 0% vs 3/7 42.9% p=0.0625) respectively. Absolute LVEF deteriorated (≤ 5-10%) less often in the GO group (1/41 2.4% vs 12/23 52.2% p <0.0001) and LVEF improved at one year in the GO group vs. deteriorating in the HO group (-0.6 % vs. +7.7% p = 0.0305). Readmission within one year was lower in the GO group (3/41 7.3% vs 8/23 34.7% p=0.01). Inpatient or outpatient treatment for systolic heart failure or requirement for ICD was also less frequent (2/41 4.8% vs 9/23 39.1% p=0.02).

CONCLUSION: Patients undergoing emergency CABG had improved survival and better cardiac recovery with controlled oxygen re-exposure. This reduces heart failure, readmission and ICD compared to hyperoxia in surgery. More prospective work is required.