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20% of the CAD patients the hyperoxic HV-apnea sequence attenuated RVGCS by more than 5% from normoxic baseline. The figure shows RVGCS of both groups during the maneuver (more negative numbers representing better systolic contractile function, i.e., circumferential shortening).

Discussion: At the conclusion of an induced respiratory maneuver, which resembles a hyperoxic anaesthesia induction sequence, awake CAD patients exhibit significant attenuation of RV peak circumferential strain. This response could be haemodynamically relevant during anaesthesia induction in high-risk CAD patients and needs to be investigated further in a scenario of general anaesthesia.

Session: Closing Session - COVID-19 Outbreak – November 6, 2020

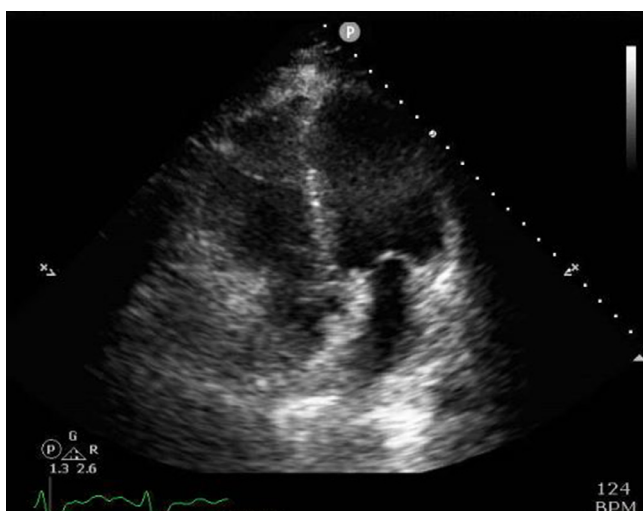
S23:04

Managing acute biventricular dysfunction during the resource-limited COVID-19 Pandemic in a major city

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Introduction: The novel coronavirus 2019 (COVID-19) and ensuing pandemic placed significant pressure on the care of critically ill patients. We present a case of a patient presenting with acute onset left ventricular systolic failure with acute right ventricular dysfunction and unremitting supraventricular tachycardia.



Methods: A 69 year-old male presented with severe shortness of breath and fever to the emergency department in March of 2020 to a major city hospital in the midst of the resource-

limited height of the COVID-19 pandemic. After a thorough history, physical exam, laboratory evaluation, and preliminary point-of-care ultrasonographic examination he was found to be have COVID-19 and mild acute respiratory distress syndrome (ARDS). He was managed initially with non-invasive ventilation, but on hospital day #6, was found to be profoundly hypoxic, confused, and tachycardic. On further evaluation, his vital signs demonstrated a fever of 38.2 C, tachycardia at 140 bpm, blood pressure 125/70 and SpO2 92% on 100% FiO2. Bedside transthoracic echocardiography demonstrated globally severely reduced left ventricular systolic function and a dilated right ventricle with severely reduced systolic function. An electrocardiogram demonstrated monomorphic supraventricular tachycardia.

Results: We describe the patient's prolonged hospital course extending forty-five days with nearly half requiring critical care. The patient eventually improved and was discharged from the hospital.

Discussion: We discuss the implications of resource-limited pandemic conditions in the care of critically ill patients. We incorporate the international experience of developed countries in facing a once-in-a-lifetime global medical emergency. In addition, we comment on the proposed ethical considerations when allocating patients to a significantly high level-of-care and the implications of this decision for other patients requiring care.

References: Phua J, Weng L, Ling L, et al. Intensive care management of coronavirus disease 2019 (COVID-19): challenges and recommendations. *Lancet Respir Med* 2020;8 (5):506–17.

Session: Perioperative myocardial infarction – November 6, 2020

S25:03

Impact of rapid versus gradual changes in arterial partial pressure of carbon dioxide on blood flow and myocardial oxygenation in an experimental anaesthetized model

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Introduction: Hyper- and hypocapnia have known vaso-modulatory effects in the coronary circulation. Oxygenation-