Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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The Utility of Televisits in Heart Transplant Recipients

S. Slomovich, K.J. Clerkin, Z.B. Roth, J. Raikhelkar, J.A. Fried, A.J. Kim, A. Kleet, P.C. Colombo, F. Latif, S.W. Restaino, M. Yuzefpolskaya, V. Topkara, M.A. Farr, G.T. Sayer and N. Uriel Medicine, Columbia University Irving Medical Center, New York, NY.

Purpose: In the current era, televisits have become requisite to assess patients and monitor their conditions. Heart transplant (HT) recipients represent a complex population with multiple co-morbidities that require frequent evaluation. This study aimed to assess the effectiveness of televist encounters in a post-heart transplant cohort during the COVID-19 pandemic.
Methods: This was a prospective cohort study of all HT recipients evaluated via a televist between 3/1/20-5/30/20, at a large academic medical center. Patient demographics, baseline medications and details of televisit encounters were collected from electronic medical records. Patients were followed for 3-months from their first televisit for medication changes, in-person visits, hospital admissions, treated rejection or infection episodes and mortality.
Results: 301 patients were enrolled, mean age was 56.0±15.1 years and 213 were males (71%). Mean time between transplant and first televisit was 49 months. The number of televisits per patient is seen in Figure 1a. Following-televisits 152 patients (50.5%) had medication changes, mostly immunosuppression (43.5%) followed by diuretics (6.0%). 141 patients (46.8%) were seen in person for either a clinic visit or RHC following a televisit. There were 61 ED visits resulting in 42 admissions in 36 patients (12.0%) (Figure 1b). Of those, 17 occurred within 2 weeks of a televisit (40.5%). There were 8 cardiac related admissions (19.0%, 5 due to treated rejection), 14 (33.3%) due to infection, and 6 due to COVID-19. One patient died due to complications of COVID-19 during the study period.
Conclusion: In this post HT cohort, there was a high rate of admissions, with most readmissions due to non-cardiac or infectious causes. This study calls into question the role of televisits in this complex patient population and merits further study of how they can best supplement usual care to enhance outcomes in patients post-HT.

Figure 1A

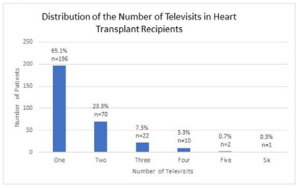
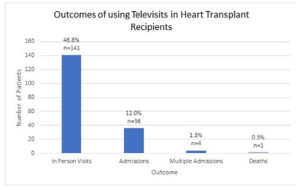


Figure 1B



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Clinical Course and Cardiac Complications of Hospitalized COVID-19 Patients

T. Rahman, A. Woo, G. Doufle and D. Thavendiranathan Cardiovascular Medicine, University of Toronto- Toronto General Hospital, Toronto, ON, Canada.

Purpose: We describe the hospitalization course, cardiac complications and echocardiographic findings in a subset of acutely ill hospitalized patients with COVID-19.
Methods: Patients admitted to a large academic hospital in Ontario, Canada from March-June 2020 with COVID-19 and who had an echocardiogram within 4-weeks of their diagnosis were included in this study. Their demographics, hospitalization details and echocardiographic findings were analyzed.
Results: 76 patients are included in our study, 83% of whom required ICU. Mean age was 58.9 years (+/-15.7 years). Cardiovascular comorbidities were common: diabetes (35.5%), hypertension (50%), CKD (11.8%), prior CAD (13.2%) or stroke (11.8%). Median length of admission was 25.5 days (IQR 22days). Overall, in-hospital mortality was high at 35.5%, with increased mortality in the ICU vs. non-ICU group (32.9% vs. 15.4%). A large number of patients required invasive support: intubation (77.6%), Extracorporeal life support (23.7%), or renal replacement therapy (19.7%). Cardiac complications included new AF (13.2%), hemodynamically significant VT (3.9%), moderate or more pericardial effusion (2.6%) and acute stroke (9.2%). Echocardiographic analysis demonstrated that 7.9% of patients developed moderate or more LV dysfunction on visual assessment. RV dysfunction was more common (27.6%) with 11.8% being visually classified as moderate or greater in severity. High sensitivity troponin was elevated in 59.2% of patients and was statistically higher in patients experiencing cardiac complications (Chi-Square 0.005). Although not achieving significance, there was a trend towards elevated troponin and development of moderate or greater LV/RV dysfunction (Chi-square 0.30).
Conclusion: In acute patients hospitalized with COVID-19, there was a high prevalence of cardiovascular co-morbidities. Troponin elevations was common and associated with a significantly increased risk of cardiovascular events and a trend towards moderate or greater ventricular dysfunction.

HOSPITALIZATION DETAILS	
Length of admission (median)	25.5 days (IQR 22)
Days on ward	4.5 days (IQR 13)
Days in ICU	18.5 days (IQR 24)
NON-CARDIAC COMPLICATIONS	
Ventilator associated pneumonia in those requiring ETT	26/59 (44.1%)
DVT/PE	14 (18.4%)
Pneumothorax in intubated patients	6/59 (10.2%)
Mesenteric ischemia	1 (1.3%)
Pancreatitis	1 (1.3%)
CARDIAC COMPLICATIONS	
New AF	10 (13.2%)
New clinically significant VT	3 (3.9%)
Moderate or more pericardial effusion	2 (2.6%)
Tamponade	1 (1.3%)
Acute stroke	7 (9.2%)
ECHOCARDIOGRAM	
LV Grade	
Normal (EF>50%)	66 (86.8%)
Mild (EF 40-50%)	4 (5.3%)
Moderate (EF 30-40%)	5 (6.6%)
Severe (< 30%)	1 (1.3%)
Regional WMA	7 (9.5%)
RV Dilation	
Normal	55 (72.4%)
Mild	12 (15.8%)
Moderate or severe	9 (11.8%)
RV Function	
Normal	57 (75%)
Mild dysfunction	9 (11.8%)
Moderate or severe dysfunction	10 (13.1%)
Pericardial effusion	
None	57 (75%)
Trace or mild	17 (22.4%)
Moderate or more	2 (2.6%)

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Cardiopulmonary Transplant Surgery - A Bedtime Story

N.J. Chilvers, R. Birla, A. Clark and S. Clark Cardiothoracic Surgery, Freeman Hospital, Newcastle Upon Tyne, United Kingdom.

Purpose: Transplant surgeons appreciate its nocturnal nature. However, human factors research suggests that fatigue has adverse effects on technical ability and patient safety. We sought to investigate the impact of out-of-hours on-call rotas.
Methods: Continuous sleep monitoring was performed for 43 working weeks using an iWatch running Sleepwatch (Bodymatter Inc). This produced automatic logs of sleep time, heart rate variability (HRV) and disruption. The Chalder Scale was completed on waking to evaluate