

Management strategy of an inpatient requiring urgent coronary artery revascularisation with prolonged SARS-CoV-2 shedding

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Abstract

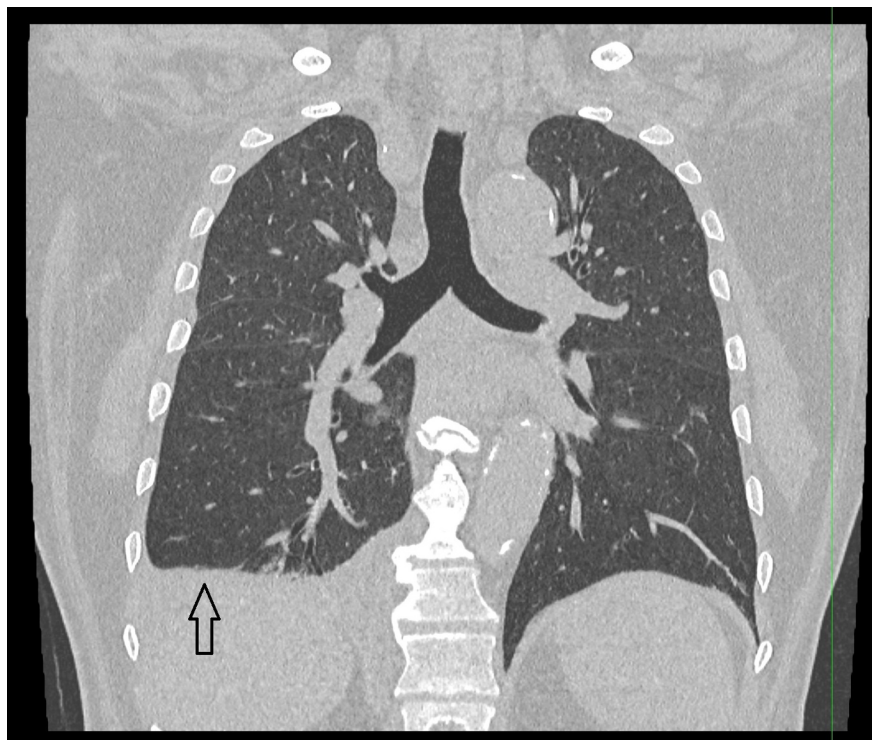
Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which originated in China, is the cause of the global pandemic Coronavirus Disease 19 (Covid-19). To date, there is no widely available vaccine or treatment, hence containment strategies are currently centred around measures ameliorating human transmission via social distancing and quarantine. Due to the magnitude of the pandemic, elective operative work had ceased within cardiac surgery at our institution and strategies adapted to facilitate safe management of surgical candidates. Here, we present the case report of an asymptomatic inpatient with prolonged viral shedding on real-time polymerase chain reaction (RT-PCR) on oropharyngeal swabs who required urgent coronary artery revascularisation, and the lessons learnt from the adapted management strategy deployed for revascularisation during the COVID-19 pandemic.

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Coronavirus Case Report 120620_DN_JBM Surgical Submission to Journal of Cardiac Surgery.pdf available at <https://authorea.com/users/329287/articles/459355-management-strategy-of-an-inpatient-requiring-urgent-coronary-artery-revascularisation-with-prolonged-sars-cov-2-shedding>









Tables

Investigations (Normal range where applicable)	Case 1: 68M, Asymptomatic	
SARS-CoV-2 Swabs	Day of swabbing – result of swab	CTh value
	Day 0 – Positive	10.53
	Day 7 – positive	3.57
	Day 10 – positive	6.36
	Day 14 – positive	12.18
	Day 18 – positive	18.74
	Day 21 – positive	16.86
	Day 24 – positive	8.74
	Day 29 – negative	-
	Day 30 – positive	9.69
	Day 33 – positive	19.64
	Day 37 – positive	20.11
	Day 40 – positive	15.73
	Day 46 – negative	-
	Day 47 – negative	-
Peak D-Dimer (0-240 ng/ml)	964 ng/ml	
Peak Ferritin (32-284 ug/L)	371 ug/L	
Peak LDH (266-500 IU/L)	402 IU/L	
Peak Troponin I (0-19.8 ng/L)	6597 ng/L*	
Vitamin D (<25 nmol/L – deficient 25-50 nmol/L – insufficient 50-75 nmol/L – adequate >75nmol/L – optimal)	8 nmol/L	
Echocardiography	Normal LV with mild LVH. LVEF 50-55% with no significant valvular abnormalities. RV appears non-dilated with mildly reduced function*	