



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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

363

Thrombosis of Mechanical Mitral Valve Prosthesis Treated With Fibrinolysis

S. Tan *, T. Abrahams, L. Splatt, B. Ho

Monash Heart, Melbourne, Vic, Australia



Background: Mechanical prosthetic valve thrombosis is an uncommon but serious complication associated with high mortality and morbidity. Conventionally, prosthetic valve thrombosis is treated with surgical intervention, but recent literature has shown that slow-infusion of low-dose fibrinolytic therapy could be of equal efficacy.

Case: A 27-year-old lady presented to the emergency department with a three-week history of worsening shortness of breath on background of mechanical mitral valve replacement for rheumatic mitral stenosis. She had recently been non-compliant with international normalised ratio (INR) checks for warfarin dosing in the setting of local lockdown for the COVID-19 pandemic. Transthoracic echocardiography revealed mechanical mitral valve thrombosis resulting in an immobile medial disc and severely restricted lateral disc, associated with severely elevated mitral inflow gradient (mean 42mmHg at 98 beats per minute) and severe pulmonary hypertension (right ventricular systolic pressure of 92mmHg). After discussion in a multidisciplinary cardiology and cardiothoracic surgical conference, the patient was treated with three daily doses of slow-infusion low-dose fibrinolytic therapy (25mg alteplase over six hours). On day three, there was complete resolution of symptoms, associated with resolution of valve thrombosis on repeat echocardiography. There were no bleeding or embolic complications, and the patient was discharged home three days later.

Conclusions: This case highlights the utility of slow-infusion low-dose fibrinolytic therapy in the management of mechanical prosthetic valve thrombosis. This conservative approach may be a useful alternative in patients with high pre-operative surgical risk.

<https://doi.org/10.1016/j.hlc.2021.06.366>

Cardiovascular Nursing (364–371)

364

This abstract has been withdrawn



365

Comparison of Hospital Resource Allocation Associated With CTCA for Intermediate-Risk ACS as Inpatient vs Expedited Outpatient

T. Wilson *, R. Gray, K. Ellenberger, D. Friedman, J. Lambros, S. Eggleton, T. Freeman, G. Mathur, G. Cranney, J. Yu

Prince of Wales Hospital, Randwick, NSW, Australia



Background: Pre-COVID, intermediate risk ACS accounted for ~50% of our local cardiac medical assessment unit (MAU) admissions and followed an inpatient pathway for further investigation. During COVID, a new protocol was

established with the aim to reduce the burden on inpatient cardiac and imaging resources, where intermediate-risk ACS patients were discharged direct from ED with arrangements made for an expedited outpatient CTCA.

Aim: The current study aim was to compare the allocation of hospital resources, completion, and timing of CTCA in the two models of care.

Methods: Retrospective cohort study comparing the characteristics and resource allocation of consecutive intermediate-risk ACS patients who went onto undergo CTCA pre- and post-COVID. The decision to investigate with CTCA was made at the discretion of the treating Cardiologist. ED and total inpatient length of stay and the cost in National Weighted Activity Units (NWAU), which is a common unit for measuring hospital activity, were compared.

Results: 78 consecutive patients were included (Table). All 39 patients in Group 1 had inpatient CTCA. 36/39 patients attended their arranged CTCA (2 patients failed to attend, 1 patient represented to hospital).

Conclusion: An expedited outpatient protocol for investigation of Intermediate-risk ACS was associated with significant reduction in total inpatient length of stay and associated costs, albeit with a significant delay in the time to diagnosis. Further examination into associated patient outcomes is warranted.

	Group 1 (Pre-COVID, 2019)	Group 2 (Post-COVID, 2020)	P value
Age	59 (42-71)	59 (51-66)	0.84
Male sex	19 (48.7%)	20 (51.3%)	0.82
Heart Score	3(2-4)	3 (2-4)	0.99
ED LOS	5 hours 25 minutes (3:41-9:44)	5 hours 20 minutes (3:54-7:53)	0.94
Time to CTCA	23 hours 35 minutes (15:17-40:17)	4 days (2-5.5)	<0.001
Total inpatient LOS	29 hours 39 minutes (19:35-51:15)	5 hours 28 minutes (3:54-8)	<0.001
Total NWAU	\$1810 (\$1634-3024)	\$1023.02 (\$0-1571)	<0.001

<https://doi.org/10.1016/j.hlc.2021.06.368>