Management of STEMI during COVID-19 in NSW

Recommendation

The Cardiac Community of Practice recommends the State Cardiac Reperfusion Strategy (SCRS) to remain unchanged during the COVID-19 pandemic, with primary percutaneous coronary intervention (PCI) offered as the first-line therapy for patients presenting with STEMI.

At the outset of the COVID-19 pandemic response in NSW, approximately 50% of cardiac catheter laboratory sites indicated that they would consider switching to thrombolysis administration as first-line treatment for STEMI patients with suspected or confirmed COVID-19.

At that time China, the first country to experience the pandemic, recommended fibrinolytic therapy as first-line therapy due to advantages in speed, logistics and reduced staff exposure. However, researchers have found COVID-19 is associated with STEMI mimics and the use of lysis may confer risk without benefit in some cases and can be exacerbated by virus-associated coagulation abnormalities.

Furthermore, a review of available thrombolytics across NSW has identified a reliance on overseas stock and with no capacity to secure ongoing supply, which could result in shortages.

An evidence review performed by the Critical Intelligence Unit demonstrated that PCI has resulted in better outcomes than lysis. Fibrinolysis is indicated when timely PCI cannot be provided and tenecteplase is the preferred lytic medication due to lower rates of bleeding and ease of administration.

As a result of these findings, the current recommendation from the Cardiac Community of Practice is that the State Cardiac Reperfusion Strategy remain unchanged and primary PCI is offered as first-line therapy for STEMI patients.

References