ACS during COVID-19 Pandemic

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- Acute coronary syndrome (ACS) in COVID-19 pandemic poses a challenge as we have to weigh the emergent cardiac risk to the patient, yet reduce the risk of COVID-19 spread amongst healthcare workers
- There have been reports of COVID-19 cases presenting as ACS such as myo-pericarditis with normal coronary arteries
- Therefore, we are recommending a conservative approach towards ACS patients
- Thrombolysis will be the mainstay for STEMI treatment (as per algorithm)
- Percutaneous coronary intervention (PCI) is then recommended only for RESCUE PCI or once COVID-19 Negative status is confirmed; perform PCI with full personal protection equipment (PPE) and terminal cleaning of cath lab post procedure
- Patients under Investigation (PUI) should be monitored in a negative pressure room or open general ward with adequate isolation until proven COVID-19 negative
- It is important to liaise with your Infectious Disease (ID) physician regarding treatment strategies

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ACS during COVID-19 Algorithm

Chest pain
Assessment

CXR /ECG/oxygen saturation
NTpBNP / D-dimer/ Troponin T / CXR / CT THORAX
ECHO – RWMA / Global WMA
Exclude myo-pericarditis (especially if echo normal)

COVID-19 LIKELY (Fever/cough/sepsis/contact/imaging abnormality)

STEMI
Send for COVID-19 TEST

COVID-19 Likely

• Consider thrombolysis (after risk vs benefit discussion) in negative pressure isolation area
• If failed thrombolysis – discuss with tertiary/COVID-19 centre

COVID-19 Unlikely

• Consider thrombolysis as first option in isolation area (unless known COVID-19 negative - then primary PCI)
• Rescue PCI if failed recanalization with full PPE and terminal cleaning of cath lab post-procedure

Consider pharmaco-invasive strategy once COVID-19 confirmed negative

NSTEMI
Stabilize with medications

COVID-19 Unlikely

• If unstable, discuss with tertiary centre
• If COVID-19 unlikely, consider PCI recanalization with full PPE

COVID-19 Negative

Stable
Treat conservatively and send to COVID-19 centre

Unstable
Discuss with tertiary/COVID-19 centre

Treat as per guidelines – PCI or drug-therapy only

COVID-19 Likely

• If unstable, discuss with tertiary centre

Send for COVID-19 TEST

COVID-19 Likely

• If COVID-19 confirmed negative

Stable
Treat conservatively and send to COVID-19 centre

Unstable
Discuss with tertiary/COVID-19 centre

Treat as per guidelines – PCI or drug-therapy only