COVID-19 – Thrombolysis for Acute Limb Ischaemia

Dr J Gavin, Dr E Zinkin, Dr R Van Hoogstraten



- Link between COVID-19 and thrombosis is well established [1]
- 57 year old man presented with 2 week history of cough & Type 1 Respiratory Failure
- Worsening oxygenation in Level 1 care, admitted to ITU on day 4 of hospital stay

Past Medical History

- Asbestosis minimal parenchymal change
- **FVC 79% of Predicted**
- **OSA**
- Type 2 Diabetes HbA1c 89
- Ex-Smoker 40 pack year history
- HTN

Baseline

- Lives alone, fully independent
- Mild functional limitation

Intensive Care Admission

Day 1 – HFNO Fi02 0.4

Day 2 - CPAP

Day 4 - Intubation & Proning - Cool Mottled Left Hand

Noted

Day 5

- Vascular Review - Brachial Arch Occlusion With No Distal

Flow

- Fi02 1.0 + Proned, Paralysed + PCV
- Initial Dose of Alteplase Given

Day 6

- Deproned + Fi02 0.45
- Repeat Dose of Alteplase

Day 10 - Extubated onto HNFO

Day 17 - Discharge from ITU

REFERENCES

Price, L., McCabe, C., Garfield, B. and Wort, S., 2020. Thrombosis and COVID-19 pneumonia: the clot thickens!. European Respiratory

Gray, H.1918. Anatomy of the Human Body – Vessels of the upper extremity

Mims.com. 2021. Image of actilyse powd for infusion 50 mg | MIMS Hongkong. [online] Available at: [Accessed 15 November 2021].





MDT Discussion

- Gold standard treatment Embolectomy in Theatre
- Unable to perform at bedside due to equipment limitation

ntensive Care

• Patient too unstable for transfer to theatre



- Unsuitable for localised catheter thrombolysis, too unstable to transfer
- Unable to perform procedure at bedside

Decision

Systemic thrombolysis as per local stroke protocol

Treatment – Systemic Thrombolysis

• 9mg Bolus followed by 81mg Infusion over 24h (Repeated after 24 hours)



Outcome & Follow Up

- Full functional recovery of hand
- Respiratory recovery to discharge
- Working Full time & back to near functional baseline

Conclusion

Systemic thrombolysis may be considered in COVID Acute arterial thrombosis and may contribute to respiratory recovery.

Conflicts of Interest – There were no conflicts of interest for this case report.