P028 AORTIC THROMBOSIS WITH PERSISTENTLY POSITIVE ANTI-PHOSPHOLIPID ANTIBODIES IN A PATIENT WITH COVID-19 PNEUMONITIS

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Background/Aims
Arterial thrombosis and positive antiphospholipid antibodies have been reported following COVID-19 infection. We report a case of aortic thrombosis occurring after COVID-19 pneumonitis, with persistently positive antiphospholipid antibodies.

Methods
A 63-year-old lady presented with sudden onset of abdominal pain radiating to the back, associated with vomiting. She reported feeling slightly breathless, and ten days prior to admission a throat swab for SARS-CoV-2 tested positive. Oxygen saturation was 96% (94-100%) on room air. Respiratory examination revealed minimal basal crackles bilaterally. Her heart sounds were normal, and there was no carotid or subclavian bruit. Radial, ulnar, brachial, subclavian and temporal pulses were intact and symmetrical. The abdomen was soft, but tender over the right upper quadrant and epigastrium. Naijolfs were normal, and there was no livedo reticularis and no vasculitic rash. Initial investigations showed a CRP of 235 mg/L (5-5). White blood cell count 15.2 x 10⁹/L (4.0-11.0), neutrophil count 12.6 x 10⁹/L (1.7-7.5). She was reviewed by the surgical team and CT Thorax, Abdomen and Pelvis requested due to the high CRP.

Results
CT showed a mild COVID pattern pneumonitis, inflammatory changes around the infrarenal aorta containing irregular circumferential clot, raising the suspicion of aortitis. An autoimmune screen was requested with following

Results
-positive IgM Anti-Cardiolipin Antibodies (ACL) at 34.6 U/mL (0.0-20.0), IgG ACL, 8.5 U/mL (0.0-20.0), Anti-B2-GP1 (B2GP1) Antibodies negative, Lupus anticoagulant (LAC) was not tested as patient was already on Low Molecular Weight Heparin (LMWH), ANA screen, Anti-ENA screen, ANCA screen, Creactive protein, 260nmol/L, normal response to Dicumarol.

The patient then self-discharged against medical advice and was reviewed as an outpatient. CT scan was reviewed by a vascular radiologist who confirmed the suspicion of aortitis. Subsequently, a 5-Fluorodeoxyglucose-Positron Emission Tomography (FDG PET) CT scan showed no evidence of active, ongoing large vessel vasculitis. A short, linear focus of mild increased FDG uptake associated with some calcification within the left lateral abdominal aortic wall was more typical of atheromatous disease than vasculitis. LMWH was switched to long-term warfarin. She has now fully recovered from COVID and has remained well. Repeat
Antiphospholipid screen taken more than 12 weeks later showed a positive IgM ACL (40.2 U/mL), and negative IgG ACL and B2GP1. Once again LAC was not tested as the patient has continued warfarin. IgM ACL positivity following COVID-19 infection has been reported by several other centres.

Conclusion

Our understanding of the significance of positive antiphospholipid antibodies and COVID-19 infection is evolving. Further research is needed to establish if there is a relationship between COVID-19 infection, thrombosis and positive ACL or if this is an epiphenomenon.

Disclosure

M. Curuvija: None. K. Hawkins: None. S. Al-Mudhaffer: None. E.P.M. Humphreys: Honoraria; E.H. has participated in advisory board meetings for Pfizer. Other; E.H. has received sponsorship to attend conferences from Abbvie, UCB and Celgene.