

P129 IMPACT OF THE ATHEROSCLEROTIC PABULUM ON IN-HOSPITAL MORTALITY FOR SARS-COV-2 INFECTION. IS CALCIUM SCORE ABLE TO IDENTIFY AT RISK PATIENTS?

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Background: Although the primary cause of death in COVID-19 infection is respiratory failure, there are evidences that cardiac manifestations may contribute to overall mortality and can even be the primary cause of death. More importantly, it is recognised that COVID-19 is associated with a high incidence of thrombotic complications.

Aim of the Study: evaluate if CAC score was useful to predict in-hospital mortality and complications in patients with COVID infection

Methods: Two-hundred-eighty-four patients with proven SARS-CoV2 infection who had a non-contrast Chest CT at our facility were retrospective analysed for coronary artery calcium (CAC) score. Primary endpoint was in-h mortality. Secondary endpoints were need for mechanical ventilation and Intensive Care Unit admission. Clinical and radiological data were retrieved.

Results: Patients with coronary calcium had higher inflammatory burden at admission (D-dimer, CRP, Procalcitonin) and higher high-sensitive Troponin I (HScTnI) at admission and at peak. While there was no association with presence of consolidation and ground glass opacities, patients with coronary calcium had higher incidence of bilateral infiltration and higher in-hospital mortality. The main finding of our research is that CAC alone does not completely identify all the population at risk of events in the setting of COVID 19 patients. Peak HScTnI was associated with higher mortality, intensive care unit admission and mechanical ventilation in both univariable at multivariable analysis.

Conclusions: Together with the presence of higher inflammation burden CAC may be a useful marker in identifying patients at risk of cardiovascular complications and in hospital mortality.