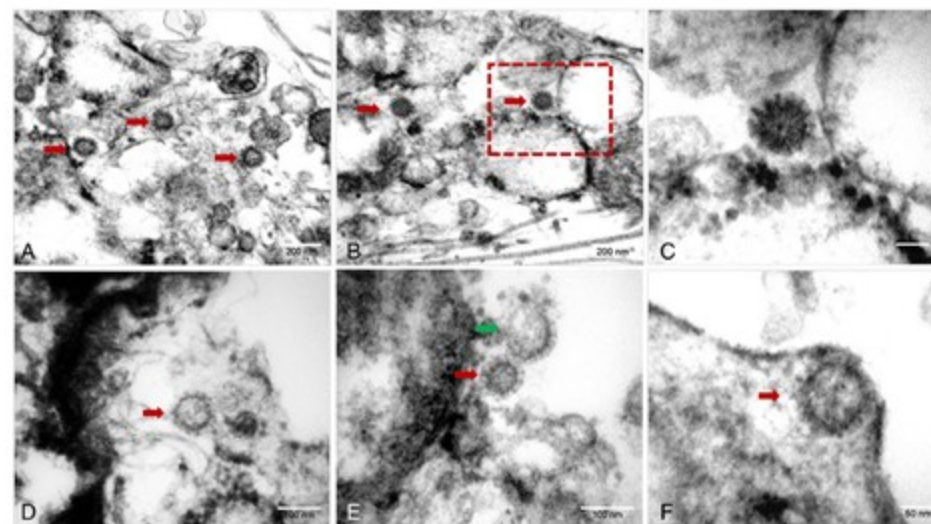


MYOCARDIAL LOCALIZATION OF CORONAVIRUS IN COVID-19 CARDIOGENIC SHOCK

- 1st case of cardiac injury directly linked to myocardial localization of SARS-CoV-2 in 69-yo patient with flu-like symptoms degenerating into respiratory distress, hypotension & cardiogenic shock. Cardiac function fully recovered in 5 days & ECMO removed.
- Endomyocardial biopsy: low-grade inflammation & viral particles in myocardium suggests viraemic phase or infected macrophage migration from lung.
- Correct diagnostic & therapeutic management requires identification of the cause: myocardial inflammation (myocarditis or myopericarditis) or necrosis
- 1st case unquestionably shows that the heart can be directly involved in infection with clinically similar to fulminant myocarditis but pathology evidence of very low-grade myocardial inflammation



Small groups of viral particles (A and B; panel C shows a higher magnification of one of the viral particles squared in dashed red box of panel B) or single particles (D–F) observed in myocardial cells.