Cardiac care of Non-COVID-19 patients during the SARS-CoV-2 pandemic: The pivotal role of CCTA

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Funding Acknowledgements: Type of funding sources: None.

Aims

To describe the role of coronary CT angiography (CCTA) as the sole available non-invasive diagnostic test for symptomatic patients with suspected CAD in a hub center for cardiovascular emergencies in the presence of limited access to hospital facilities during the COVID-19 pandemic.

Methods and Results

From March 9th to April 30th, during the peak of the COVID-19 pandemic, a consecutive cohort of symptomatic patients with high clinical suspicion of CAD and clinical indication to CCTA were enrolled in a hub hospital in Milan, Italy. When obstructive coronary artery disease was detected (>70% diameter stenosis in a proximal coronary segment or >90% stenosis in any coronary segment) patients were referred to invasive coronary angiography (ICA). Clinical follow-up was assessed in patients in whom ICA was considered deferrable.

Overall, 58 consecutive patients were included. Ten (17.2%) symptomatic patients underwent ICA according to CCTA findings, while in 48 (82.8%) patients ICA was deferred. No clinical events were recorded after a mean follow-up of 49.7 ± 16.8 days. In nine out of ten patients referred to ICA, severe coronary artery disease was confirmed and treated accordingly. Changes in medical therapy were significantly more prevalent in patients with vs. those without CAD at CCTA.

Conclusion: We report a potential pivotal role for CCTA in the triage of non-COVID-19 patients with suspected CAD during the SARS-CoV-2 pandemic. CCTA may be helpful for identifying patients who necessitate ICA, ensuring adequate resource utilization during the pandemic.