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134 Impact of COVID-19 pandemic on timing and early clinical outcomes of transcatheter aortic valve implantation

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Aims: COVID-19 pandemic deeply changed the management of patients with aortic stenosis. Many cardiac societies have drawn up guidelines for the optimal management of this population but applicability of such recommendations in the current clinical practice and their impact on clinical outcomes has not been adequately investigated.

Methods and results: A single-centre retrospective study included 315 patients undergoing transcatheter aortic valve implantation (TAVI) between April 2017 and June 2021. To analyse the impact of hospitalization pathways during the pandemic on clinical outcomes of TAVI patients, study population was divided into two groups (pre-pandemic and pandemic groups) and all perioperative/follow-up data were compared. The primary endpoint was all-cause mortality at 30 days; secondary endpoints included procedural success and short-term complications. Pandemic group patients showed a more complex baseline clinical profile (NYHA III-IV, 70.1% vs. 56.3%; $P=0.03$). The overall time to procedure was significantly longer during pandemic (56.9 ± 68.3 vs. 37.7 ± 25.4 ; $P=0.004$) while intensive care unit stay was shorter (2.2 ± 1.4 vs. 3.3 ± 3.5). Hospitalization length was similar in both group as well as all-cause mortality rate and the incidence of major periprocedural complications.

Conclusions: COVID-19 pandemic did not affect the safety and effectiveness of TAVI as similar rates of procedural complications and all-cause mortality were reported than before February 2020. Despite the increased time lag between diagnosis and procedure and a more complex clinical profile of patients at baseline, the revised pathway of hospitalization allowed to resume inpatient procedures while not affecting patients' and healthcare workers' safety.