

**Hip Fracture Care in the Elderly During the COVID-19 Pandemic:
Is There an Association Between Confinement and Mortality in
SARS-CoV-2–Negative Patients?**

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Purpose: The SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) outbreak put unprecedented pressure on the healthcare system. At the same time, a “stay-at-home” indication was imposed. The lockdown generated a reduction in high-energy trauma, but patients with hip fractures continued to be referred to the emergency department. We analyzed hospital morbidity, mortality, and readmission rates at 30 days in COVID-19–negative hip fracture patients treated during the global pandemic and report on their outcomes.

Methods: We performed a retrospective cohort study of 77 recent and 470 historical hip fracture patients. Patients with hip fractures occurring between April 1, 2020 and June 30, 2020 or between April 1 and June 30, 2015/16/17/18/19 were enrolled in a hospital registry of elderly patients with hip fracture. The cohort was separated into 2 groups: «pre-COVID» (PC), including 470 patients, and «COVID» (C), consisting of 77 patients. All C patients tested negative for SARS-CoV-2. Patients were stratified based on demographic characteristics. Outcome measures were 30-day complications, readmissions, and mortality.

Results: Age, sex, type of fracture, time to surgery, and hospital discharge were similar between both groups ($P>0.05$). All C patients were American Society of Anesthesiologists class III or IV and had a higher score for Charlson and Clinical Frailty Scale ($P<0.05$). Both in-hospital (20, 7%) and 30-day (33, 7%) complication rates increased ($P<0.01$). Thromboembolic disease and blood transfusions were the most relevant. Readmissions (all negative for SARS-CoV-2) were similar between both groups ($P = 0.34$). No difference was detected for 30-day mortality ($P = 0.151$).

Conclusion: Patients in the C group, subjected to a prolonged lockdown, were more fragile and comorbid than the control group. Such characteristics translated into an increased number of complications following treatment.