



AB092. SOH22ABS033. The effect of coronavirus disease 2019 (COVID-19) on 30-day mortality rates amongst Irish fragility hip fracture patients

Conor Medlar¹, Colum Downey¹, Patrick O'Kelly², Ben Murphy³, John Quinlan¹

¹Department of Trauma and Orthopaedic Surgery, Tallaght University Hospital, Dublin, Ireland; ²Department of Nephrology and Transplantation, Beaumont Hospital, Dublin, Ireland; ³Department of Orthopaedics, St. Vincent's University Hospital, Dublin, Ireland

Background: Fragility hip fracture patients are vulnerable to high rates of short-term mortality, which may have been exacerbated by the coronavirus disease 2019 (COVID-19) pandemic. This study will assess the effect of COVID-19 on 30-day mortality rates amongst a group of Irish hip fracture patients. Additionally, patient demographics, length of stay, admission haematological parameters, fracture type and surgical procedure will be assessed.

Methods: A multicentre, observational, retrospective study of hip fracture patients (n=1,017) admitted to six Dublin teaching hospitals during the COVID-19 pandemic was performed. For comparative purposes, equivalent data was retrospectively collected relating to hip fracture patients admitted to the same teaching hospitals in 2019.

Results: There were 481 patients admitted during the 2020 study period, compared with 536 patients in 2019. Approximately sixty-six percent of patients were female and the mean patient age was 77.6 years. Recorded 30-day mortality rates were 5.4% in 2020 and 4.3% in 2019 (P=0.338). There was an insignificant decrease in patients' mean length of stay (17.85 days in 2020 *vs.* 18.82 days in 2019; P=0.106). Advancing age (P=0.021), male gender (P=0.019), low admission haemoglobin (P=0.024) and high admission white cell count (P=0.019) were all associated

with 30-day mortality.

Conclusions: We found no significant difference in 30-day mortality rates amongst our cohort of hip fracture patients during the COVID-19 pandemic. Advancing age, male gender, anaemia at admission and leucocytosis at admission were associated with increased 30-day mortality. The continuation of COVID-19 related safety protocols in the treatment of hip fracture patients is essential in maintaining a safe hip fracture service.

Keywords: 30-day mortality; coronavirus disease 2019 (COVID-19); hip fracture; SARS-CoV-2; short-term mortality

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-22-ab092

Cite this abstract as: Medlar C, Downey C, O'Kelly P, Murphy B, Quinlan J. AB092. SOH22ABS033. The effect of coronavirus disease 2019 (COVID-19) on 30-day mortality rates amongst Irish fragility hip fracture patients. *Mesentery Peritoneum* 2022;6:AB092.