

J Frailty Aging 2021;10(1):75-76
Published online October 9, 2020, <http://dx.doi.org/10.14283/jfa.2020.54>

LETTER TO THE EDITOR

EFFECTS OF THE COVID-19 PANDEMIC ON COVID-19 NEGATIVE GERIATRIC PATIENTS WITH HIP FRACTURES

Introduction

Since December 2019, the novel coronavirus (COVID-19) had affected millions globally, particularly putting elderly and persons with chronic diseases at risk (1). 95% of all COVID-19 deaths in Singapore are older adults (2). As public health policymakers try to control the pandemic by focusing resources on COVID-19, the general population fear contracting coronavirus from hospitals, resulting in changes in their healthcare seeking behaviour. We describe two cases demonstrating the direct and indirect impact of COVID-19 to our geriatric patients in Singapore who have sustained hip fractures.

Case Presentation

Case 1 is an 81-year-old lady who has hypertension and chronic kidney disease. She fell on 15th April 2020 while mopping the floor and sustained a left neck of femur (NOF) fracture. She consulted a private General Practitioner (GP) who confirmed the diagnosis radiologically. Despite her GP's advice, she did not proceed to the emergency department (ED) due to fears of contracting COVID-19 there. She eventually presented eight days later with worsening hip pain and functional decline. On admission, she was noted to have pitting edema on her left leg. To avoid further delays, she underwent a bipolar hemiarthroplasty next day. Post-operatively, her left leg swelling worsened and an ultrasound Doppler scan showed a left limb deep vein thrombosis (DVT). She was commenced on anticoagulation. Unfortunately, she developed cardiac tamponade requiring urgent pericardiocentesis and close monitoring in the intensive care unit. Eventually, an inferior vena cava filter was inserted. Her cumulative hospitalization was three months prior to discharge.

Case 2 is a 74-year-old gentleman who has diabetes mellitus, hypertension, and degenerative disc disease. He fell in the toilet on 15th April 2020 and attended the ED of Hospital A on the same day. Initial review of the pelvic X-ray (XR) film by the ED doctors was not suggestive of any fractures. He was transferred to Hospital B as majority of the wards in Hospital A have been repurposed into COVID-19 wards with limited 'clean' inpatient beds. Subsequently the radiologist reported the XR as 'indeterminate for a fracture'. In view of patient's persistent left hip pain, a magnetic resonance imaging (MRI) of left hip was done and confirmed a left NOF fracture. He was transferred to Hospital C as Orthopedic services

were temporarily unavailable in Hospital B. This gentleman declined surgery after extensive counselling and opted for early discharge. He represented three days later due to unbearable left hip pain, and finally agreed for surgical fixation. Post-operatively, he underwent rehabilitation and was eventually discharged home after six weeks. He had not returned to the hospital for follow up appointments due to fear of contracting COVID-19.

Discussion

A study done in the United States demonstrated that up to one-third of patients have delayed seeking medical care in the ED due to COVID-19 fears (3). Case 1's access to Orthopedic opinion and surgical intervention was hampered by her fear of contracting COVID-19 from the hospital. Early surgery for hip fixation after hip fracture has been associated with improved outcomes in multiple studies (4). The delayed presentation along with a period of immobility at home may have contributed to the development of the deep vein thrombosis.

Logistical COVID-19 related arrangements with redistribution of healthcare workers and resources had contributed to Case 2's delay in diagnosis and subsequent access to Orthopedic services. He was transferred to two different hospitals after his initial ED presentation, and eventually returned to the first hospital for definitive management. His patient journey experience may have contributed to his initial refusal for hip surgery. The fragmentation of care across different hospitals would have contributed to difficulty establishing patient rapport, affecting the doctor-patient relationship. He subsequently did not return for follow up after discharge. Studies have illustrated that COVID-19 positive cases with hip fractures have higher mortality rates (5). Despite being tested negative for COVID-19, both patients had suffered significant delay to surgical intervention both directly and indirectly in this current COVID-19 pandemic. They had both described complications of pain, functional decline, and immobility, affecting their psychological wellbeing along with prolonged hospital stays. These geriatric syndromes may increase risk of adverse outcomes related to COVID-19 regardless of infectious states (6).

Disclosure Statement: The authors declare no conflict of interest. Both patients had provided informed consent to the publication of their cases. All authors have contributed to the writing and editing of manuscript. There were no financial assistance or grants in any form throughout the production of this manuscript.

Acknowledgements: All authors have contributed to the writing and editing of manuscript. We have received no financial assistance or grants in any form throughout the production of this manuscript. We appreciate National University Health Systems for supporting us in research writeups and publications.

COVID-19 NEGATIVE GERIATRIC HIP FRACTURE

S.M. Lim¹, M. Tan², Y.L. Sze², L. Au²

1. National University Health Systems, Singapore; 2. Division of Geriatric Medicine, Ng Teng Fong General Hospital, Singapore

Corresponding Author: Dr Seok Mei Lim, Division of Geriatric Medicine, Ng Teng Fong General Hospital, 1 Jurong East Street 21, Singapore 609606, Email address: seok_mei_lim@nuhs.edu.sg, Tel: +65 6716 2000, Fax: +65 6716 5500

References

1. World Health Organisation. Coronavirus disease (COVID-2019) Situation Reports. Available at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports> .Accessed June 2, 2020
2. Ministry of Health Singapore. Support Measures For Seniors During COVID-19. Available at <https://www.moh.gov.sg/news-highlights/details/support-measures-for-seniors-during-covid-19>. Accessed June 6, 2020
3. American College of Emergency Physicians National Survey (<https://www.emergencyphysicians.org/globalassets/emphysicians/all-pdfs/acep-mc-covid19-april-poll-analysis.pdf>) [PDF] Accessed June 2, 2020
4. Moja, L., Piatti, A., Pecoraro, V., Ricci, C., Virgili, G., Salanti, G., Germagnoli, L., Liberati, A., & Banfi, G. (2015). Timing Matters in Hip Fracture Surgery: Patients Operated within 48 Hours Have Better Outcomes. A Meta-Analysis and Meta-Regression of over 190,000 Patients. <https://doi.org/10.1371/journal.pone.0046175>
5. Muñoz Vives, J. M., Jornet-Gibert, M., Cámara-Cabrera, J., Esteban, P. L., Brunet, L., Delgado-Flores, L., Camacho-Carrasco, P., Torner, P., & Marcano-Fernández, F. (2020). Mortality Rates of Patients with Proximal Femoral Fracture in a Worldwide Pandemic: Preliminary Results of the Spanish HIP-COVID Observational Study. *The Journal of Bone and Joint Surgery. American Volume*. <https://doi.org/10.2106/JBJS.20.00686>
6. Aprahamian, I., & Cesari, M. Geriatric Syndromes and SARS-Cov-2: More than Just Being Old. *The Journal of frailty & aging*, 2020;9(3), 127–129. <https://doi.org/10.14283/jfa.2020.17>