August 13, 2020

**Concerns Regarding Early Treatment of Proximal Femoral Fragility Fractures In COVID-19 patients: Need to Study Optimum Time For Surgery**

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We read with great interest the article published by Francesco Catellani, Andrea Coscione, Riccardo D’Ambrosi, Luca Usai, Claudio Roscitano, and Gennaro Fiorentino, titled Treatment of Proximal Femoral Fragility Fractures in Patients with COVID-19 During the SARS-CoV-2 Outbreak in Northern Italy. The authors have suggested that early fixation of proximal femoral fracture in elderly COVID-19 patients contributes to improves pulmonary function, in-hospital mobilization, and the overall outcome((1). However, we have certain concerns regarding the methodology and the interpretation of the outcome, which need to be addressed before sincere recommendations can be drawn from the study.

1) Although it is agreeable that early surgical intervention in elderly patients with hip fractures improves outcome, extrapolation of similar recommendations in COVID-19 patients may not be reasonable. Surgery in COVID-19 patients has been associated with exacerbation of the COVID related illness, postoperative
ICU requirement, and higher mortality and therefore should be postponed whenever feasible. In the current study, perioperative mortality was 30.7% (4 out of 13 patients) which is reasonably high. Severe hypoxemia is associated with acute inflammation of the respiratory system, operating patients during this phase may provoke a “second hit” reaction which may contribute to higher mortality. Moreover, there is a risk of exposure and transmission to the theatre team. Therefore, in the absence of clear benefits and potential disadvantages of early surgery during the acute phase of COVID-19, it may be safer to delay the surgery until the achievement of COVID negative status or at least till the recovery of the acute phase of infection.

2) If table 1 and table 2 have a corresponding patient sequence, the patient no 2, 4, 7 and 8 had deterioration of pulmonary function on the 3rd postoperative day along with the death of three others. We could not understand that at which stage did the authors observed improved respiratory function in 12 patients. Stabilization of respiratory function in 61.5% of the patients (8 out of 13) at seventh post-operative day may simply imply the natural recuperation from the disease.

3) The use of an intramedullary nail in trochanter fracture is a potential aerosol-generating procedure that needs to be avoided to decrease the disease transmission to the theatre team. For this reason, the guidelines issued by National health services (NHS) recommend the use of sliding hip screw fixation of trochanteric fractures rather than Intramedullary nails in COVID-19 patients with hip fracture, where possible. Moreover, reaming can further deteriorate already compromised lung function by generating fat emboli. We believe the readers must be aware of such guidelines before adopting the recommendations from articles published in this subject matter.

4) Lastly, the use of hydroxychloroquine and azithromycin together increase the risk of cardiovascular mortality due to their synergistic effect on QT prolongation. In the absence of proven benefit and recognized side effects, the combination should be used cautiously and better avoided in COVID-19 patients with cardiac conditions.

References


Conflict of Interest: None Declared