Arthroplasty Today 6 (2020) 1053–1054

Contents lists available at ScienceDirect

Arthroplasty Today

journal homepage: http://www.arthroplastytoday.org/

Letter to the editor

Response to Letter to the Editor on "Elective Orthopaedic Surgeries During Coronavirus Disease 2019 Pandemic"

We would like to thank the authors for their thoughtful review and commentary on our manuscript entitled "Timing and Tips for Total Hip Arthroplasty in a Critically Ill COVID-19 Patient with a Femoral Neck Fracture: A Case Report [1]".

We agree with the authors that the risks and harms of coronavirus disease 2019 (COVID-19) in our patient were greater than the additional risks of delayed surgery. According to criteria put forward by Rizkalla et al. [2], our case differs from an elective total joint arthroplasty (TJA), as we presented a critically ill, decompensated patient with active COVID-19 disease and an acute femoral neck fracture. As concluded by Collins et al. [3] and Rodrigues-pinto et al. [4], with implementation of safe surgical practices (ie, proper personal protective equipment [PPE], dedicated COVID-19 operating room, communication with anesthesia team, etc.) and strict classification to guide medical necessary orthopaedic surgeries, urgent procedures can still be successfully conducted in patients with active COVID-19. Safe perioperative protocols continue to expand as the medical community expands its understanding of this novel virus.

In this particular case report, shared decision-making between orthopaedics, a COVID-19 dedicated infectious disease team, pulmonary critical care team, and anesthesia team helped us identify uptrending inflammatory markers. This led to a deliberate surgical delay, which ultimately yielded a positive patient outcome. Further supporting our decision to delay surgery, a recent meta-analysis by Zeng et al. [5] concluded that rising and elevated inflammatory markers do indeed correspond with the severity of COVID-19. They recommend trending these markers to assist in patient prognostication and to help with clinical decision-making, similar to our findings.

In addition, we agree with the authors that the decision to resume elective TJA should be based on strict criteria aimed at avoiding unnecessary exposures and complications secondary to COVID-19. Elective surgery should not resume without adequate PPE stockpiles, large-scale testing capabilities, and ample hospital capacity—in particular intensive care resources. Each institution must decide with guidance from local and state authorities when it is safe to resume elective procedures. The European Hip Society and European Knee Associates have put together protocols to ensure safe return to elective TJA [6]. Preoperatively, patients must be educated on the risk of COVID-19, especially those with pre-existing comorbidities. To protect patients and hospital personnel, all patients should be screened for COVID-19 within 5 days of their scheduled procedures. A positive COVID-19, or symptoms of such, should be an absolute contraindication for elective surgery. Perioperatively, appropriate PPE must be used, and when indicated, spinal anesthesia should be used to prevent aerosolization of potential viral particles during intubation and extubation. Postoperatively, enhanced recovery protocols should be used with an emphasis on early discharge to home. Finally, telemedicine visits should be used over in-person visits when clinically appropriate.

In conclusion, we appreciate the thoughtful response by the authors regarding our manuscript describing a deliberate delay in surgery in a patient with COVID-19 requiring total hip arthroplasty. Urgent TJA may be safely performed in appropriately selected patients with active COVID-19 if proper multidisciplinary team decision-making is used. As for the return to elective joint replacement, individual institutions need to follow guidance from local and state authorities, who should be constantly analyzing the local COVID-19 burden. If deemed safe, specific protocols, for all phases of care, must be followed to ensure safe and effective delivery of important, but elective, orthopaedic surgeries.

Conflict of interests

The authors declare there are no conflicts of interest.

References

[1] Kaidi AC, Held MB, Boddapati V, Trofa DP, Neuwirth AL. Timing and tips for total hip arthroplasty in a critically ill COVID-19 patient with a femoral neck fracture: a case report. Arthroplasty Today 2020;6:566.
[2] Rizkalla JM, Gladnick BP, Bhimani AA, Wood DS, Kitziger KJ, Peters Jr PC. Triaging total hip arthroplasty during the COVID-19 pandemic. Curr Rev Musculoskelet Med 2020;1:416.
[3] Collins AP, Crespo A, Couto P, et al. Medically necessary orthopaedic surgery during the COVID-19 pandemic: safe surgical practices and a classification to guide treatment. J Bone Joint Surg Am 2020;102(14):e76.
[4] Rodrigues-Pinto R, Sousa R, Oliveira A. Preparing to perform trauma and orthopaedic surgery on patients with COVID-19. J Bone Joint Surg Am 2020;102:946.
[5] Zeng F, Huang Y, Guo Y, et al. Association of inflammatory markers with the severity of COVID-19: a meta-analysis. Int J Infect Dis 2020;96:467.
[6] Kort N, Barrena EG, Bédard M, et al. Recommendations for resuming elective hip and knee arthroplasty in the setting of the SARS-CoV-2 pandemic: the European Hip Society and European Knee Associates Survey of Members. Knee Surg Sports Traumatol Arthrosc 2020;28:2723.

DOI of original article: https://doi.org/10.1016/j.artd.2020.09.002.

https://doi.org/10.1016/j.artd.2020.09.001

Michael B. Held, MD, MBA*, Venkat Boddapati, MD, Austin C. Kaidi, MSc, David P. Trofa, MD, Alexander L. Neuwirth, MD
Department of Orthopedic Surgery
Columbia University Medical Center
New York, NY, USA

* Corresponding author. 630 West 168th Street, PH-11, New York, NY 10032, USA. Tel.: +1 914 329 9750.
E-mail address: mh3821@cumc.columbia.edu (M.B. Held).

3 September 2020
Available online 11 September 2020