Letter to the Editor: Early experience of aortic surgery during the COVID-19 pandemic in the United Kingdom: A multicenter study

Sara Alzaglool¹ and Osama Al-Jaiuossi¹

¹Al-Bashir Hospital

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Correspondence: 1. Sara Alzaglool

Contact: +962797244907 Email: Sarah97.zg@hotmail.com

Institute: Al-Bashir Hospital

Address: Al Bashir Hospital, Ossamah Ben Zeid St. 261, Amman, Jordan

Co-authors: 2. Osama Al-Jaiuossi

Contact: +962788003306 Email: Osamaeyad@ymail.com

Institute: Al-Bashir Hospital

Address: Al Bashir Hospital, Ossamah Ben Zeid St. 261, Amman, Jordan

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To the Editor:

We have read the article by Ana Lopez Marco et al.1 entitled "Early experience of aortic surgery during the COVID-19 pandemic in the United Kingdom: A multicenter study" with great enthusiasm and interest. 1 This manuscript, which is concise and insightful for readers, is the result of the authors' extraordinary efforts. We concur with the conclusion that the service provision for aortovascular pathologies shifted during the early months of the pandemic while maintaining urgent and emergency care. The combination of the preoperative COVID19 screening protocol, self-isolation, and shielding contributed to our series's low incidence of COVID19. During this period, surgical outcomes for aortovascular patients are comparable to national pre-pandemic benchmarks. During the recovery phase or future waves of the COVID19 pandemic, these findings support the continuation of surgery for this patient population. Nonetheless, we feel compelled

to highlight specific issues that would have significantly improved the quality of this article and influenced its outcomes.

First, any amended pathway during the COVID-19 outbreak will need to be optimized and convenient, with minimal use of healthcare resources and limited exposure of the vulnerable transcatheter aortic valve implantation (TAVI) patient to possible COVID-19 infection. Pathway designs raise several questions, including should case selection be altered, should the work-up be changed, is there a role for balloon aortic valvuloplasty, should the technique be performed differently, and should the duration of stay be shortened. Possibly the most challenging part of patient care is the final phase, the so-called "recovery phase," because there are numerous unknown variables and any predicted timeline at this time is pure speculation. After the peak of the COVID-19 pandemic, planning must begin for the reintroduction of the TAVI service; however, in the absence of efficient COVID-19 treatment, strict regulations will persist. There is little debate regarding the necessity of emergency surgery for acute type A aortic dissection or ruptured aortic aneurysm unless other factors, such as malperfusion, prolonged shock, or advanced age, anticipate an extremely poor prognosis. In contrast, the choice to continue operating on high-risk thoracic aortic aneurysms, such as symptomatic, rapidly growing, or giant aneurysms (>7 cm), as well as (saccular) pseudoaneurysms, is significantly more complex and may be considered for urgent surgery depending on the risk of aneurysm-related death and the availability of resources. The surgery of asymptomatic patients with smaller aneurysms can be delayed for two to three months. 3 even though the consensus for COVID-19 management fluctuates daily due to rapidly changing circumstances, we strongly advocate for mandatory testing regardless of COVID-19 symptoms or hemodynamic instability. The current screening process will not detect COVID-19 infections in patients with mild or no symptoms. Instead of waiting for RT-PCR results, many surgeons may believe a negative CT for typical radiographic features suffices as a screening for COVID-19 infection. CT imaging may be a more reliable and practical for diagnosing COVID-19 than RT-PCR, particularly in epidemic areas.4

References:

- Lopez-Marco A, Harky A, Verdichizzo D, Hope E, Rosser B, McPherson I, Kelly R, Holland L, Ye Oo A; UK AS Research Group. Early experience of aortic surgery during the COVID-19 pandemic in the UK: A multicentre study. J Card Surg. 2021 Mar;36(3):848-856. doi: 10.1111/jocs.15307. Epub 2021 Jan 13. PMID: 33442890; PMCID: PMC8013563.
- 2. Khialani B, MacCarthy P. Transcatheter management of severe aortic stenosis during the COVID-19 pandemic. Heart. 2020 Aug;106(15):1183-1190. doi: 10.1136/heartjnl-2020-317221. Epub 2020 Jun 10. PMID: 32522820; PMCID: PMC7398459.
- 3. George I, Salna M, Kobsa S, Deroo S, Kriegel J, Blitzer D, Shea NJ, D'Angelo A, Raza T, Kurlansky P, Takeda K, Takayama H, Bapat V, Naka Y, Smith CR, Bacha E, Argenziano M. The rapid transformation of cardiac surgery practice in the coronavirus disease 2019 (COVID-19) pandemic: insights and clinical strategies from a centre at the epicentre. Eur J Cardiothorac Surg. 2020 Oct 1;58(4):667-675. doi: 10.1093/ejcts/ezaa228. PMID: 32573737; PMCID: PMC7337744.
- 4. Fukuhara S, Tang H, Kim KM, Tan L, Shen K, Song G, Tang T, Patel HJ, Wei X, Yang B. Type A Aortic Dissection During COVID-19 Pandemic: Report From Tertiary Aortic Centers in the United States and China. Semin Thorac Cardiovasc Surg. 2021 Summer;33(2):303-312. doi: 10.1053/j.semtcvs.2020.10.034. Epub 2020 Nov 7. PMID: 33171243; PMCID: PMC7648657.