Letter to the Editor: Management of aortic arch hypoplasia in neonates and infants

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Letter:

To the Editor,

With great interest, I have read the article "Management of aortic arch hypoplasia in neonates and infants" by Mehmet A. Onalan et al.1 It was a privilege for me to read such a well-written paper, and I applaud the authors' exceptional efforts. I concur with the article's conclusion that one-stage repair with appropriate

outcomes can treat aortic arch reformation in infants and neonates with tubular arch hypoplasia and that in neonates with co-morbidities, a palliative two-stage approach should be explored. However, it seemed that a few additional points would have enhanced the end of the piece.

In the first place, the study's retrospective nature raises several problems due to the possibility of recollection bias and incorrect patient reporting, which may have been mitigated if the investigators had included current cases at the time. Secondly, doing a single-centered study may result in bias due to differences in health, socioeconomic, and environmental variables and the constrained statistical analysis. Thirdly, the authors should have explained the surgical technique more thoroughly. Research conducted between 1990 and 1993 showed that 13 infants with severe aortic arch hypoplasia underwent excision and carotid flap plasty.2 For neonates with substantial aortic arch hypoplasia, resection combined with carotid flap plasty is regarded as an effective initial step in a phased repair. In addition, the patients' ethnicity should have been indicated by the authors throughout the research, as this would have revealed more about a diverse community. As per a study, some patients with aortic arch hypoplasia suffer from persistent arch blockage, while others acquire hypertension as a long-term consequence after coarctation surgery.3

A neonate with a hypoplastic aortic arch might provide the surgeon with several complications. As the complexity of the arch's architecture and any related pathologies develops, so make these difficulties.3 In addition to the technical difficulties inherent in surgical repair, the decision-making process can be challenging. Imaging that is precise and exhaustive is a crucial beginning step. Currently, insufficient evidence raises uncertainty on the optimal surgical plan and method. This is significant because decisions taken during the neonatal era can affect not only the immediate management but also the patient's long-term outcome. Consequently, it is advised to approach these decisions with much deliberation, thoroughness, and deliberation.4 Therefore, aortic arch repair for tubular arch hypoplasia in newborns and children without accompanying intracardiac lesions can be accomplished with great short- and long-term outcomes. At intermediate follow-up following patch aortoplasty, there are few problems associated with the repair site. Alternative perfusion and surgical methods are required to enhance outcomes in newborns with intracardiac abnormalities undergoing arch rebuilding.5

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