Author has nothing to disclose with regard to commercial support.

superiority of either technique. We need to be careful not to overstate the use of AA cannulation in aortic arch surgery, especially when the study is of a small sample size and there are no comparative outcomes reported in using IA cannulation as an alternative arterial cannulation method.

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<https://doi.org/10.1016/j.jtcvs.2019.06.098>

REPLY: FINDING THE BEST OPTION OF THE CANNULATION SITE

Reply to the Editor:

Aortic lesions are often detrimental to aortic cannulation. Ideally, cannulations should be placed at sites with a healthy aortic or arterial wall. The jet of blood from the cannula can have a sandblast effect on the adjacent diseased aortic wall and could lead to disastrous embolic complications or aortic dissection. Thus, aortic cannulation is a really sensitive issue in aortic surgery. The issue includes not only the cannulation site but also the size and shape of the cannula.

I completely agree with the conclusion in the letter by Harky and colleagues.¹ The use of the axillary artery cannulation in aortic arch surgery should not be overstated. The authors imply the superiority of the innominate artery cannulation to the axillary cannulation. Attention should also be given to the cannulation at the innominate artery, which is showing its presence. I have often observed the fragile atheroma at the orifice of the innominate artery during

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aortic arch surgery. Such lesions are less frequently seen at the orifice of the left common carotid artery. Accordingly, a cannula for selective cerebral perfusion is often inserted first at the left common carotid artery in my practice. The innominate cannulation might have more powerful jet at the lesion of the orifice, and the axillary cannulation has less sandblast effect due to the long distance to the orifice in the same situation. To find the best cannulation site, minute evaluation of the quality of the aorta by preoperative computed tomography and epi-aortic echography during operation is essential.

The comparison between the innominate cannulation and axillary cannulation is essential to understand the drawbacks and advantages of each cannulation procedure. One may be better than the other in particular cases. The cannulation site should be decided for each situation for cases with various aortic lesions. Fortunately, we can use several cannulation sites and can also combine them to prevent complications.

Standardization is key to achieve safety of the surgery. We need a standard in surgical techniques. However, only one golden standard cannot be determined for the choice of cannulation technique, especially in aortic surgery. Aortic surgeons should know several ways of the cannulation and apply the best option of the cannulation site to fit the situation.

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REPLY FROM THE AUTHORS: THE OPTIMUM ARTERIAL CANNULATION SITE DURING OPEN AORTIC ARCH REPAIR: IS IT THE AXILLARY

ARTERY?

Reply to the Editor:

Thank you for thoughtful comments. I agree with your comment that the possibility of bias exists from combined axillary artery (AA) cannulation. We carried out an analysis comparison outcome of pure AA and non-AA groups. Pure