grade cerebral perfusion. In addition, direct repair of a fragile arterial wall can be challenging at times. Most cannulae being used are primarily designed for femoral or aortic cannulation, as was the case in our patient. A few cannulae designed specifically for axillary artery cannulation simply take into consideration the required angulation without addressing the perfusion limitations. On the other hand, the use of an interposition graft may be preferable to direct cannulation, particularly when atherosclerosis of the aortic branches is suspected, as it may be less traumatic to the arterial endothelium [2, 5]. An additional benefit of this technique is that antegrade cerebral perfusion pressure can be monitored with a right radial artery catheter. Nevertheless, regardless of the type of cannulation, direct or via an interposition graft, it is advisable that the surgeon directly observes the aorta during the initiation phase of CPB as the few first seconds may be critical.

In conclusion, the appearance of catastrophic complications, such as acute aortic dissection, following cannulation of the axillary artery is possible and the surgeon should carefully choose the technique that is best suited to the particular situation. Precautions can be taken to minimize the occurrence of these complications and deal successfully with them when they occur. Axillary artery cannulation techniques that take into consideration the limitations of existing techniques need to be developed.

References


eComment: TEE- and guidewire-guided axillary artery cannulation. An option?

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I confirm that this is a scary experience [1]. What do the authors think about TEE guided cannulation over the wire? The wire is easily identified on TEE and wire-guided cannulation and should carry a lower risk regarding intimal disruptions. We adopted this policy after a similar incident. Congratulations for saving the patient and the excellent final result.

Reference