Even in patients whose aortic dissection displays a 360-degree circumferential separation of the lumina [9], DTLC facilitates safe and fast cannulation. Accordingly, DTLC should not only be considered as a ‘bail-out’ strategy when peripheral cannulation fails. Its major advantage is the correct identification of the true lumen and thus an antegrade organ perfusion.

**SUPPLEMENTARY MATERIAL**

Supplementary material is available at ICVTS online.

Conflict of interest: none declared.

**REFERENCES**


**COMMENT**

Inadequate organ perfusion is one of the major problems in patients presenting with AADA. Prompt establishment of antegrade systemic perfusion may prevent further dissection, organ malperfusion and cerebral embolization [2]. Instant antegrade perfusion can be achieved by DTLC of the ascending aorta. Normothermic circulatory arrest of up to 5 min can be tolerated [8], which should enable identifying the true lumen and placing the arterial cannula—usually, this part required <2 min [4, 6]. Preliminary aortic arch inspection for further entries of the dissection allows for precise definition of the consecutive surgical procedure with respect to temperature management and cerebral protection regime. When the presumed diagnostic findings are restricted to the ascending aorta, the arterial cannula can be moved to the aortic arch. This cannulation site has been applied as a quick, safe and easy approach in patients with AADA [4, 6, 7].

We consider the Overholt clamp placement behind the dissected aorta as the riskiest part of DTLC. Most important is the careful dissection between the adventitial layer of the ascending aorta and the pulmonary artery: the adventitial layer of the aorta must remain intact when placing the tape.

eComment. Acute aortic dissection type A: which strategy of the arterial perfusion to choose?

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We read with the great interest the report of Conzelmann and colleagues [1], describing the original method of direct aortic cannulation and we congratulate the authors for their excellent results. However, the separation between the adventitial layers of the ascending aorta and the pulmonary artery can lead to rupture of the aorta in this area. In addition, direct cannulation of the true aortic can be complicated by thromboembolism in the case of the false lumen thrombosis. Inadequate organ perfusion is one of the major problems in patients with acute type A aortic dissection (AADA). Until recently, the retrograde perfusion via the femoral artery was the perfusion mode of choice in thoracic aortic surgery [2] but in some cases, this was marked by a high risk of potential malperfusion and atheroembolic complications associated with retrograde perfusion, especially in dissections.

In recent years, subclavian artery cannulation for AADA has become a widely accepted arterial access for antegrade aortic and cerebral perfusion [3,4]. Surgical
exposure of the subclavian artery is easy to perform, and if the operative field and
the patient are routinely prepared for this procedure, it is rapidly performed.
At our institute, 148 patients with AADA underwent surgery. As of 2004, we have
been using the subclavian arterial perfusion in the majority of patients. This has led
to a significant reduction in the incidence of postoperative multiple organ failure,
and has reduced hospital mortality (from 24% to 8-10% in recent years). In our
practice, surgical exposure and cannulation of subclavian artery usually require an
additional 5-10 minutes, but in any case, it does not affect the outcome of the op-
eration. We have rarely found heavily diseased subclavian arteries and involvement
of a subclavian artery by the dissection process is also rare. In addition, the use of
this technique facilitates the work of the surgeon at the expense of absence of ar-
terial cannula in a working zone, as well as reduces the risk of embolic complica-
tions. All this, in our opinion, makes this method more preferable.
However, in emergency situations with highly unstable haemodynamics or in
case of dissections extending into the innominate artery, the method described by
the authors may be useful [1].
In conclusion, we would like to note that the ascending aortic cannulation of the
true lumen under direct vision deserves serious consideration as a safe and rapid
way to ensure antegrade arterial perfusion in same unstable patients with acute
type A dissection. However, this method requires further study.

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for proximal aortic surgery is as safe in the emergent setting as in elective