Reply to the Letter to the Editor

Reply to Goksel and Tireli

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We would like to thank Goksel and Tireli for their recent comments [1] on our recently published article [2]. We do not have any experience with off-pump surgery for cavopulmonary shunt or Fontan completion. This technique certainly has attractions of avoiding the potential deleterious effects of cardiopulmonary bypass as highlighted, particularly in terms of pulmonary vascular resistance and inflammatory response. It would be interesting to know the exact impact on the amount and duration of pleural drainage. Our greatest concern with the off-pump technique is that it does not really allow for any reconstruction or plasty of the pulmonary arteries, which frequently needs addressing at the time of surgery, particularly following the Norwood procedure. We prefer a bypass approach which is close to normothermia on the beating heart and feel this allows for accurate assessment of the PAs and where necessary augmentation and reconstruction. It also guarantees maintenance of cardiac output should there be problems with bleeding or accessing the IVC. We await further evidence to evaluate the benefits and risks of off-pump Fontan surgery.

References


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Letter to the Editor

Reduction ascending aortoplasty: how safe is it?

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I read with interest the article by Feindt and colleagues [1] describing a conservative operation including reduction ascending aortoplasty (RAA) with external reinforcement for ascending aortic aneurysms. I congratulate the authors on their satisfactory results.

Reduction aortoplasty with or without external reinforcement rather than graft replacement in patients with moderately sized ascending aneurysm of the aorta is still controversial. It is less technically demanding than tube graft replacement of the ascending aorta, but long-term results reveal a debatable issue.

I would like to add some comments. We do not understand why data in their article about bicuspid aortic valve (BAV) are different from the explanations in the conference discussion at end of the article. They stated in the text that they have 14 patients with BAV but that they had none in the conference discussion. Which one is true? Patients with BAV have pathology of the intrinsic aortic wall. The medial degeneration that occurs in some of these patients is likely secondary to these hemodynamic factors, although some have suggested intrinsic aortic weakness in patients with BAV [2]. This clinically reflects in the particularly frequent association of a BAV and a dilated ascending aorta. The intrinsic abnormalities of the aortic wall exclude any guarantee of satisfactory long-term results as to recurrence of the dilatation.

The other comment is about coronary bypass patients with external reinforcement. What is their way of proximal anastomosis of saphenous vein graft?

RAA with external reinforcement reduces wall stress by restoring both normal aortic diameter and wall strength [3]. On the other hand, external reinforcement has been found unnecessary in some studies. Recently, Walker and co-workers [4] have reported that, with the technique including RAA without external reinforcement, a redilatation can be prevented and the elastic property of the ascending aorta (Windkessel function) remains preserved in patients suffering from a moderately enlarged ascending aorta who require cardiac surgery for other indications. Moreover, dislocated wrap after previous RAA causes erosion of the ascending aorta. External reinforcement may cause erosion in the rear side of the aorta by the wrinkles of the prosthesis itself. To prevent late complications, especially redilatation of the ascending aorta due to dislocation of the wrap, secure anchoring of the prosthetic wrap to the aorta is mandatory [5].

In a limited group of patients suffering from concomitant aortic valve disease, we agree with the authors that