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In our practice, we routinely take precautions for securing the right atrium. These are extensive opening of the right pleura and intentional rightward luxation of the heart, opening the pericardial reflection over the superior venae cavae, and leaving the right pericardial stay sutures free while performing the anastomosis on the circumflex and distal right coronary artery target vessels. A second and more important measure is continuous monitoring of the interatrial septum with transesophageal echocardiography during the positioning of the heart. Right atrial distention due to intravenous fluid replacement and external compression of the heart may easily lead to intermittent right-to-left shunting during the procedure, which may lead to cyanosis, even to paradoxical embolization from right to left. In practice, because transthoracic echocardiography is less sensitive than transesophageal examination, it is not always possible to detect a PFO during routine preoperative evaluation. Therefore, we think these simple precautions should be considered in all cases with OPCAB to prevent untoward effects of a right-to-left shunting, such as hypoxemia and systemic paradoxical embolization.

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PFO IS GENERALLY BENIGN IN OPCAB: UNTIL IT ISN'T

Reply to the Editor:

In a letter to the Editor, Drs Ozyuksel and Cetin comment on our editorial commentary¹ on an original article by Morita and colleagues.² To be clear, the former incorrectly credited DrCaton and me with the case presentation rather than Dr Morita and associates, who authored the case report. Drs Ozyuksel and Cetin describe techniques to mitigate

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cardiopulmonary dysfunction due to positioning during off-pump coronary artery bypass (OPCAB) surgery. I agree that these are worthwhile maneuvers, providing probable benefit at low risk to patients. Drs Ozyuksel and Cetin suspect that shunts through a patent foramen ovale (PFO) are more likely to manifest detrimentally when positioning the heart to address left-sided lesions. However, among the limited published case reports of desaturation due to PFO shunting,²⁻⁶ all 3 reports that mention the targets being addressed during desaturation describe this occurring while addressing right-sided lesions.^{2,3,5}

Another point that Drs Ozyuksel and Cetin make is that PFO is not a benign pathology in OPCAB patients. I counter that the fact that PFO is so common and yet infrequently results in shunting sufficient to cause desaturation during OPCAB demonstrates its generally benign nature. The point of our commentary was that PFO is usually untroubling but can take a turn for the worse, and that turn appears to be more commonly toward right-sided lesions.

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HYBRID MANAGEMENT IN ADULT CONGENITAL AORTIC DISEASE: AN ESTABLISHED APPROACH

To the Editor:

We read with interest the article by Belitsis and colleagues,¹ "Pseudoaneurysm at the Origin of the Left Subclavian Artery Following Type A Interrupted Aortic Arch Repair in

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Adulthood, London, United Kingdom,” and the editorial commentary by Burkhart and colleagues,² “Complex Congenital Aortic Arch Disease: The Need for Mandatory Long-Term Follow-up.”

Belitsis and colleagues¹ solved the problem in an effective but difficult way for the surgeons and the patient. Fortunately, the patient had a good outcome.

We agree with Burkhart and colleagues² on the long-term follow-up of congenital aortic operated cases to avoid the inherent morbidity and mortality they have.

Related to the report by Belitsis and colleagues,¹ we agree with Burkhart and colleagues² on a hybrid approach, that is, after a common carotid artery left subclavian artery bypass is performed. To stent the graft pseudoaneurysm, a short covered stent should be used, and if residual significant gradient exists across the aortic arch, an ascending-descending aortic bypass through a median sternotomy should be performed to avoid a hostile dissection field.³

State of the art imaging techniques, that is, computed angio-tomography and magnetic resonance angiography, allow us to follow up, diagnose, and treat patients in a way that was unthinkable a few years ago. The availability of recent noninvasive techniques and last-generation devices permits us to manage complex problems in different fields (ie, congenital, degenerative, trauma)^{4,5} and others with less risk. The use of hybrid procedures in cardiovascular surgery has to be in the repertoire of any surgeon, and cooperation with other colleagues is the key for success.

This case illustrates how the cardiovascular global community can interact to discuss information that is useful for everyone.

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LONG-TERM FOLLOW-UP IS MANDATORY FOR HYBRID APPROACHES TO COMPLEX CONGENITAL HEART SURGERY

Reply to the Editor:

I want to thank Dr Armenta-Flores et al for their perspective on an interesting and challenging congenital cardiac case. It appears that we are all in agreement with regard to: (1) the need for long-term follow-up in adults with congenital heart disease and (2) the need for surgeons to continue to grow and expand their surgical armamentarium when approaching these interesting patients.

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CARDIOTHORACIC SURGICAL CRITICAL CARE SURGEONS: MANY OF THE FEW

To the Editor:

The editorial commentary by Anderson¹ is a timely and much appreciated communication. This author is in agreement that a truly complete cardiothoracic surgeon² is fully educated, trained, and skilled in all aspects of cardiothoracic surgical practice, including postoperative management and critical care (Figure 1). As such, they are eligible for certification in whichever area of practice (ie, subspecialty) they choose.

Allowing such choice is precisely what the American Board of Thoracic Surgery has done over the years, with the evolution and flexibility of its mechanisms for certification, and the elimination of the requirement of certification