great arteries in patients with transposed great arteries who had a sternotomy redone in the Fontan operation.

If it is complicated to close the pulmonary antegrade flow during the Fontan procedure due to transposition of the great arteries, transcatheter intervention can be performed safely and effectively after the surgery.

Alper Güzeltaş, İbrahim Cansaran Tanıdır, Murat Saygı
Department of Pediatric Cardiology, Mehmet Akif Ersoy Cardiovascular Research and Training Hospital; İstanbul-Turkey

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Address for Correspondence: Dr. Alper Güzeltaş, İstanbul Mehmet Akif Ersoy Eğitim Araştırma Hastanesi İstasyon Mah. Turgut Özal Bulvarı No:11, Küçükköy, İstanbul-Türkiye
Phone: +90 212 692 20 00
Fax: +90 212 471 94 94
E-mail: alperguzeltas@hotmail.com
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Author’s Reply

To the Editor,

We would like to thank the authors of the letter for their interest about our paper entitled “Transcatheter closure of antegrade pulmonary blood flow with Amplatzer muscular VSD occluder after Fontan operation.”, published in the September issue of The Anatolian Journal of Cardiology 2014; 14: 565 (1). In 1971, Fontan and Baudet described a surgical procedure for repair of tricuspid atresia that built on experimental and clinical research from the 1940s. Today, the Fontan procedure is the most commonly performed staged palliative surgical procedure in patients with single ventricle physiology to ultimately create a circulatory system driven by a single ventricle without passing the right ventricle (2). It has been performed to treat several complex congenital heart diseases, including tricuspid atresia, hypoplastic left heart syndrome, pulmonary atresia with intact ventricular septum, and double-inlet ventricle.

At the time of the Fontan procedure, it is necessary to remove all origins of supplemental pulmonary blood flow to avoid volume loading of the heart. However, this can result in acute reduction in ventricular preload and diastolic dysfunction in the early postoperative period (3). In addition, some studies reported that non-pulsatile pulmonary blood flow decreased capillary flow and increased vascular resistance (2). On the other hand, there is a risk of persistent pleural effusions or progressive ventricular failure in patients having forward flow from the ventricle to the pulmonary arteries after Fontan procedure (3). As a result, it is controversial as to whether additional sources of systemic to pulmonary artery flow are beneficial or not.

Transcatheter closure of accessory antegrade pulmonary blood flow is an alternative to surgery, because it is less invasive, easy to perform, reliable, and more comfortable (4, 5). Numerous kinds of devices are now commercially available for the closure. Petko et al. (4) showed that the off-label use of Amplatzer Septal or Ductal Occluders or an Amplatzer Vascular Plug for the closure was effective for the reduction of ventricular volume load and resolution of the pleural effusions, which can occur as a complication after cavopulmonary shunt or Fontan procedure. Desai et al. (3) also reported that the use of a Raskind Umbrella Occluder or Amplatzer Septal or ductal occluder for the closure was a safe and effective technique after cavopulmonary shunt or Fontan procedure.

In my opinion, an issue that is worthy of discussion may be the thrombotic problems in the author’s case. Devices can be placed to the pulmonary artery band or pulmonary valve tissue or above the pulmonary valve (4). The place and approach for occlusion can be modified by patient anatomy and technical ease. By the way, if there is room between the pulmonary valve and device, the stasis of blood in the room can lead to formation of a thrombus. The thrombus is also possible for patients who have undergone surgical ligation of main pulmonary artery distally to the pulmonary valve, creating a pulmonary artery stump (6). In conclusion, we think that patients with a risk of thrombosis over time should be followed up more often in clinical practice, and anticoagulation may be considered in these cases.

Mustafa Gülgün¹, Tevfik Karagöz²
¹Department of Pediatric Cardiology, Gülhane Military Medical Academy; Ankara-Turkey
²Department of Pediatric Cardiology, Faculty of Medicine, Hacettepe University; Ankara-Turkey

References

Address for Correspondence: Dr. Mustafa Gülgün, Gülhane Askeri Tip Akademisi, Pediyatrik Kardiyoloji Bölümü 06010 Etlik, Ankara-Türkiye
Phone: +90 312 304 43 93
Fax: +90 312 304 43 81
E-mail: mustafagulgun@yahoo.com, mgulgun@gata.edu.tr
Available Online Date: 21.01.2015

Basilic vein transposition should be the first option

To the Editor,

We have read with great interest the article, entitled ‘Long-term patency of autogenous saphenous veins vs. polytetrafluoroethylene
Basilic vein transpositions have been performed since 1976. There are many techniques for transposing basilic veins to superficially, like minimal invasive surgery, video-assisted surgery, and catheter-assisted surgery. With these techniques, basilic vein transposition can be performed with comfortable conditions for the patient and surgeon and does not require large incisions (2). The only technical challenge for basilic vein transposition is operating for obese individuals and accessing the fistula for hemodialysis. Otherwise, in the text, the authors present that upper arm bridge graft interpositions can be first preferable alternative for hemodialysis access after using the forearm superficial veins. According to the National Kidney Foundation, patients should be considered for transposed basilic vein fistula after using the wrist radiocephalic and elbow brachiocephalic fistulas. If upper arm bridge grafts are used before the basilic vein, performing the basilic vein transposition technique can be impossible or very difficult because of the inefficient mobility of the proximal basilic or axillary vein after occlusion of the bridge graft fistulas (3, 4).

In conclusion, as mentioned in the study, native arteriovenous fistulas have been recommended as a first option, with lower complication and costs, for forearm and upper arm fistulas, but we believe that basilic vein transposition is not a challenging technique using minimally invasive techniques, allowing an easy operation. After finishing autogenous forearm fistula chances, the transposed basilic vein should be the first operative technique, as recommended by the National Kidney Foundation, instead of bridge fistula with saphenous or PTFE grafts.

References


Address for Correspondence: Dr. Adem İlkay Diken, Hitit Üniversitesi, Çorum Eğitim ve Araştırma Hastanesi, Kalp ve Damar Cerrahisi, Çorum-Türkiye

E-mail: ademilkay@gmail.com

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Subacute myocardial infarction due to long-term paint thinner and ecstasy abuse

To the Editor,

Substance abuse can cause death, as well as negative effects, on social life and is becoming more common among young people.