Patients with AML prolapse due to Barlow disease were managed using the parachute technique in our study. For those patients with extreme excess of tissue, our initial strategy was triangular resection to eliminate some of the tissue and parachute for treating the prolapse. However, triangular resection was completely abandoned for the most recent patients. As an alternative, we have started to crimp excess tissue on the Dacron cloth, which has further simplified and accelerated the correction of AML prolapse.

Konstantinos Zannis, MD
Laurens Mitchell-Heggs, MD
Département de Pathologie
Cardiaque
Institut Mutualiste Montsouris
Paris, France

References

1. Zannis K, Mitchell-Heggs L, Di Nitto V, Kirsch ME, Noghin M, Ghorayeb G, et al. Correction of anterior mitral prolapse: the parachute technique. *J Thorac Cardiovasc Surg.* 2012; 143(4 Suppl):S24-8.
2. Adams DH, Rosenhek R, Falk V. Degenerative mitral valve regurgitation: best practice revolution. *Eur Heart J.* 2010;31:1958-66.
3. Adams DH, Anyanwu AC, Rahmanian PB, Abascal V, Salzberg SP, Filsoufi F. Large annuloplasty rings facilitate mitral valve repair in Barlow's disease. *Ann Thorac Surg.* 2006;82: 2096-101.
4. Barlow JB, Pocock WA. The significance of late systolic murmurs and mid-late systolic clicks. *Md State Med J.* 1963;12:76-7.
5. Barlow JB, Pocock WA. Billowing, floppy, prolapsed or flail mitral valves? *Am J Cardiol.* 1985; 55:501-2.
6. Carpentier A, Chauvaud S, Fabiani JN, Deloche A, Relland J, Lessana A, et al. Reconstructive surgery of mitral valve incompetence: ten-year appraisal. *J Thorac Cardiovasc Surg.* 1980;79:338-48.

<http://dx.doi.org/10.1016/j.jtcvs.2012.06.033>

THE EFFECT OF INNOMINATE CANNULATION ON CEREBRAL PERFUSION

To the Editor:

We congratulate Shi and colleagues¹ on their study, "Repair of Stanford Type A Aortic Dissection With Ascending Aorta and Hemiarch Replacement Combined With Stent-Graft Elephant Trunk Technique by

Using Innominate Cannulation." In this study, the flow in the innominate artery during total body perfusion was toward the arcus aorta. During cerebral perfusion, the flow rate was 8 to 10 mL/(kg · min). Transient neurologic deficit occurred in 10 patients, which indicates that this situation is not a focal event but is related to perfusion defect. Urbanski and associates² pointed out that pressure monitoring is mandatory and explained the complications arising from low perfusion. During total body perfusion, the direction of flow is toward the arcus aorta, which causes Venturi effect in the cerebral bed and affects the cerebral perfusion. We conclude that this technique may cause neurologic complications. We think if pressure monitoring were to be instituted, this problem could be predicted.

Sahin Bozok, MD^a
Mert Kestelli, MD^b
Hakan Karamustafa, MD^a
Sedat Ozan Karakisi, MD^a
^aDepartment of Cardiovascular
Surgery
Rize University Faculty of Medicine
Rize, Turkey
^bDepartment of Cardiovascular
Surgery
İzmir Atatürk Training and Research
Hospital
İzmir, Turkey

References

1. Shi E, Gu T, Yu L, Xiu Z, Zhang Z, Wang C, et al. Repair of Stanford type A aortic dissection with ascending aorta and hemiarch replacement combined with stent-graft elephant trunk technique by using innominate cannulation. *J Thorac Cardiovasc Surg.* 2011;142:1458-63.
2. Urbanski PP, Lenos A, Zacher M, Diegeler A. Unilateral cerebral perfusion: right versus left. *Eur J Cardiothorac Surg.* 2010;37:1332-6.

<http://dx.doi.org/10.1016/j.jtcvs.2012.03.086>

Reply to the Editor:

We thank Bozok and colleagues for their insightful comments on the technique of innominate artery cannulation during surgical repair of

Stanford type A aortic dissection, as described in our recently published article.¹

Cannulation of the innominate artery directly² or with a side graft³ has been shown to be a simple and effective alternative in aortic arch surgery. In our series, 10 patients showed transient neurologic dysfunction, and in most cases this was simple confusion lasting less than 48 hours. No permanent neurologic dysfunction occurred. Transient neurologic dysfunction such as confusion is a frequent complication after cardiac surgery, especially among aged patients. We do not think that our results for brain protection are bad. During total body perfusion, the brain can be perfused through the left carotid artery as well as the right carotid artery. Therefore innominate artery cannulation is safe during surgical repair of Stanford A aortic dissection. We also agree, however, that pressure monitoring makes cerebral perfusion more accurate.

Enyi Shi, MD, PhD
Tianxiang Gu, MD, PhD
Department of Cardiac Surgery
First Affiliated Hospital
China Medical University
Shenyang, China

References

1. Shi E, Gu T, Yu L, Xiu Z, Zhang Z, Wang C, et al. Repair of Stanford type A aortic dissection with ascending aorta and hemiarch replacement combined with stent-graft elephant trunk technique by using innominate cannulation. *J Thorac Cardiovasc Surg.* 2011;142:1458-63.
2. Ji S, Yang J, Ye X, Wang X. Brain protection by using innominate artery cannulation during aortic arch surgery. *Ann Thorac Surg.* 2008;86: 1030-2.
3. Huang FJ, Wu Q, Ren CW, Lai YQ, Yang S, Rui QJ, et al. Cannulation of the innominate artery with a side graft in arch surgery. *Ann Thorac Surg.* 2010;89:800-3.

<http://dx.doi.org/10.1016/j.jtcvs.2012.05.062>

ALCOHOL AND ADHESIONS

To the Editor:

The recent article by Lassaletta and colleagues¹ fascinated me, just as did

the sober judgment by Menasché² in his commentary. I am reminded of Robert Hutchison's litany, recounted here, "From inability to let well alone; from too much zeal for the new and contempt for what is old; from putting knowledge before wisdom, science before art, and cleverness before common sense; from treating patients as cases, and for making the cure of the disease more grievous than the endurance of the same, Good Lord, deliver us."³ It seems William Stewart Halstead's wisdom of reconstructing tissue planes is relegated to history.

Even Menasché² in his commentary recognizes that adhesions between the heart and sternum pose a major risk at reentry. He goes on to suggest that, for local problems, you have to find local solutions. I have been closing the pericardium completely for 34 years (more than 12,000 cases) for all operations, including coronary artery bypass grafting. In reoperative surgery, there is absolutely no risk at all of catastrophic hemorrhage if I have done the primary surgery. There is a safety cover over the heart, and amazingly few and flimsy adhesions between heart and pericardium, especially if it was washed thoroughly before closing. In many patients, some pericardial fluid also makes dissection of the heart easy.

The article by Lassaletta and colleagues¹ attempts to offer very imaginative and provocative solutions to postoperative adhesions. The article is not conclusive, because the adhesions were thought to be significantly less, and when the observer was blinded there was no difference between vodka-fed and wine-fed swine. Fortunately, there is no mention of the dose of vodka per kilogram or otherwise. This article might induce surgeons to prescribe a generous dose of vodka to patients who could be candidates for reoperations.

So what is the lesson from this article? Are we to look for exotic solutions anew, or simply follow basic

surgical principles of surgery and restore nature's protection to the heart?

Arkalgud Sampath Kumar, MCh
Department of Cardiothoracic and
Vascular Surgery
Pushpanjali Institute of Cardiac
Sciences
Ghaziabad, India

References

1. Lassaletta AD, Chu LM, Sellke FW. Effects of alcohol on pericardial adhesion formation in hypercholesterolemic swine. *J Thorac Cardiovasc Surg.* 2012;143:953-9.
2. Menasché P. Vodka to prevent postoperative adhesions: another unsuspected cardiac benefit of alcohol. *J Thorac Cardiovasc Surg.* 2012;143:9601.
3. Hutchison RE. Modern treatment. *BMJ.* 1953;1:671.

<http://dx.doi.org/10.1016/j.jtcvs.2012.05.077>

Reply to the Editor:

From the antibacterial properties of penicillin to the sweetness of saccharin, the antiadhesive properties of Teflon (polytetrafluoroethylene), or the now most-prescribed use of Viagra (sildenafil), countless medical and scientific discoveries have been made by the observation of unexpected qualities or side effects in experiments designed for a completely different purpose. In the recent study by Lassaletta and colleagues,¹ the findings of reduced pericardial adhesions and fibrosis with the administration of vodka were both surprising and unexpected in a study designed to evaluate myocardial perfusion and vessel density.² The reductions in pericardial adhesions at reoperative sternotomy and the decreases in intramyocardial fibrosis and transmural collagen deposition all did, however, reach statistical significance. The dose of ethanol administered to both the red wine and vodka treatment groups was 45 mL per day. With animal weights averaging just a bit more than 30 kg at the end of the 11-week experiment, this would translate to roughly 1¼ cups of vodka for an 80-kg person, if the pigs were

drinking these substances directly. In our experiment, however, the ethanol-containing agents were mixed with the chow and allowed to soak before feeding. Because of the volatility of ethanol, the actual amount consumed by the animals was thus likely to be less. For this reason, we measured the blood alcohol levels of the animals in both treatment groups, which averaged roughly 35 mg/dL 1 hour after consumption (equivalent to 0.035 g/100 mL on a standard breath alcohol analyzer, with 0.08 being the legal limit for intoxication in most U.S. states). The blood alcohol concentrations in this study were thus consistent with what most previous studies have considered to fall into the range of "moderate alcohol consumption."

Although our findings of decreased adhesions and fibrosis with vodka administration were significant, a definitive mechanism for the decrease has yet to be established. As addressed in the original article's conclusion,¹ such a mechanism would have to be defined before any progression to a clinical trial. That being said, ethanol is one of the most widely consumed pharmacologic substances in the world, with a well-known safety profile and an abundance of growing evidence demonstrating its cardioprotective properties at moderate doses. Although we aren't suggesting that physicians send their postoperative cardiac patients home with a prescription for vodka, we certainly wouldn't advocate abstinence for current, moderate drinkers.

Closure of the pericardium most certainly can reduce the incidence of opening catastrophe, but it may be associated with short-term hemodynamic compromise. Not all surgeons close the pericardium for this very reason. In this experiment, the pericardium was reapproximated with interrupted, braided nylon sutures, which still allowed drainage of any accumulated pericardial fluid into the left hemithorax.