TABLE 1. A. Test values of patients and controls. B. Test values at baseline (atorvastatin 40 mg/day) and 3 months of study (atorvastatin 80 mg/day).

Part A	Patients (n = 29)	Controls (n = 39)	*P* value	Part B	Baseline (n = 26)	Postintervention (n = 26)	*P* value
SUA (mg/dL)	6.0 (4.9–6.9)	5.2 (4.0–6.1)	.036		6.0 (4.9–6.8)	5.8 (4.8–6.4)	.018
Total cholesterol (mg/dL)	221 (228–252)	230 (204–249)	.862		229 (201–258)	192 (173–217)	.001
HDL-c (mg/dL)	42 (37–52)	50 (43–56)	.011		42 (36–50)	42 (38–48)	.517
LDL-c (mg/dL)	145 (130–174)	155 (130–177)	.820		146 (131–175)	122 (95–138)	.001
Triglycerides (mg/dL)	163 (97–252)	110 (77–146)	.008		166 (87–250)	132 (103–194)	.201
CRP (mg/dL)	0.30 (0.16–0.64)	0.15 (0.07–0.37)	.019		0.32 (0.17–0.69)	0.14 (0.09–0.34)	.004

n, Sample size; *SUA,* serum uric acid levels; *HDL-c,* high-density lipoprotein cholesterol; *LDL-c,* low-density lipoprotein cholesterol, *CRP,* C-reactive protein.

preoperative statin therapy can reduce cardiac mortality after CABG by means of mechanisms that are independent of their cholesterol-lowering properties.[3] We suggest that one of these mechanisms may be the hypouricemic effect of statins. The underlying mechanisms of this effect of statins are not clear-cut. It has been speculated that statins increase renal blood flow and, thus, increase renal urate excretion and lower serum creatinine levels.[4] According to the results shown by Hillis and associates[1] and given that measurement of SUA is a routine procedure with repeatable results in clinical laboratories, we propose the clinical importance of monitoring and intervention on the basis of increased SUA levels and re-emphasize the positive effect of using high doses of statins.[5]

Ángel López-Cuenca, MD[a]
Vanessa Roldán, MD, PhD[b]
Francisco Marín, MD, PhD[a]
[a]*Department of Cardiology*
Hospital Universitario Virgen de la Arrixaca
University of Murcia
Murcia, Spain
[b]*Department of Haematology*
Hospital Morales Meseguer
Murcia, Spain

References

1. Hillis GS, Cuthbertson BH, Gibson PH, McNeilly JD, Maclennan GS, Jeffrey RR, et al. Uric acid levels and outcome from coronary artery bypass grafting. *J Thorac Cardiovasc Surg*. 2009;138:200-5.
2. Kakafika A, Tsimihodimos V, Elisaf M. Effect of atorvastatin on serum uric acid levels. *Atherosclerosis*. 2001;158:255.
3. Collard CD, Body SC, Shernan SK, Wang S, Mangano DT. Multicenter Study of Perioperative Ischemia (MCSPI) Research Group, Inc; Ischemia Research and Education Foundation (IREF) Investigators. Preoperative statin therapy is associated with reduced cardiac mortality after coronary artery bypass graft surgery. *J Thorac Cardiovasc Surg*. 2006;132:392-400.
4. Athyros VG, Mikhailidis DP, Liberopoulos EN, Kakafika AI, Karagiannis A, Papageorgiou AA, et al. Effect of statin treatment on renal function and serum uric acid levels and their relation to vascular events in patients with coronary heart disease and metabolic syndrome: a subgroup analysis of the GREek Atorvastatin and Coronary heart disease Evaluation (GREACE) Study. *Nephrol Dial Transplant*. 2007;22:118-2.
5. López-Cuenca A, Marín F, Roldán V, Climent VE, Valdés M, Lip GY. Effects of atorvastatin 80 mg daily on indices of matrix remodelling in 'high-risk' patients with ischemic heart disease. *Int J Cardiol*. 2008 Aug 21 [Epub ahead of print.].

doi:10.1016/j.jtcvs.2009.08.063

EXTENDING THE SUITABILITY OF ENDOVASCULAR THERAPIES DURING TYPE A ACUTE AORTIC DISSECTION REPAIR

To the Editor:

We read with interest the article of Sun and coworkers[1] on the use of the stented elephant trunk for type A acute aortic dissection (TAAD). The aim of this hybrid approach is to stabilize the residual dissected aorta and thus prevent late thoracoabdominal aneurysm formation and the need for reoperation. Even though the idea is extremely attractive, we are doubtful that stenting the descending aorta is really needed during TAAD repair. Indeed, a literature review reveals that expansion of the residual dissected aorta after surgical repair is a slow and linear process that makes distal reoperations relatively uncommon. In an article published on the same issue of this *Journal,* Stevens and collegues,[2] reporting the 25-year experience of the Massachusetts General Hospital with 195 patients treated for TAAD, concluded: ''Aortic reoperations were infrequent during follow-up.'' In another recent paper, Geirrson and collegues[3] reported that only 12 of 221 patients required late reoperation for thoracoabdominal aneurysm. Similarly, Dobrilovic and Elefteriades[4] reported just 4 distal reoperation in a series of 200 patients operated on for TAAD.[3] Taking these data into consideration, we believe that adjunctive descending endovascular stent grafting during emergency surgical repair might add supplementary risk to an alredy complex procedure with a high mortality rate, stabilizing something that has a low probability to cause a surgical problem in the future.

In our opinion, a solution to improve long-term results of TAAD is represented by combining a radical surgical resection with an extensive arch debranching to create a safe and long proximal landing zone for subsequent endovascular procedures on the descending aorta, if needed.

Our technique consists in replacing the ascending aorta and the arch and relocating the origin of the supra-aortic vessels very proximally just above the sinotubular junction, using a specially designed quadrifurcated vascular prosthesis (The Plexus 4-Branch; Vascutek Terumo Inc, Scotland, United Kingdom). If the patient will be one of the few who needs a second procedure on the descending aorta, this preventive debranching will allows a safe and effective endovascular treatment in both the short and the long term.

Mattia Glauber, MD
Michele Murzi, MD
Department of Adult Cardiac Surgery
G. Paquinucci Heart Hospital
Fondazione CNR-G. Monasterio
Massa, Italy

References

1. Sun LZ, Qi RD, Chang Q, Zhu JM, Liu YM, Yu CT, et al. Surgery for acute type A dissection using total arch replacement combined with stented elephant trunk implantation: experience with 107 patients. *J Thorac Cardiovasc Surg*. 2009;138:1358-62.
2. Stevens LM, Madsen JC, Isselbacher EM, Khairy P, MacGillivray TE, Hilgenberg AD, et al. Surgical management and long-term outcomes for acute ascending aortic dissection. *J Thorac Cardiovasc Surg*. 2009;138:1349-57.
3. Geirsson A, Bavaria JE, Swarr D, Keane MG, Woo JY, Szeto WY, et al. Fate of the residual distal and proximal aorta after acute type A dissection repair using a contemporary surgical reconstruction algorithm. *Ann Thorac Surg*. 2007;84:1955-64.
4. Dobrilovic N, Elefteriades JA. Stenting the descending aorta during repair of type A dissections: technology looking for an application? *J Thorac Cardiovasc Surg*. 2006;131:777-8.

doi:10.1016/j.jtcvs.2009.12.047

Reply to the Editor:

We appreciate the comments made by Glauber and colleagues regarding our article about surgical treatment of acute type A dissection using the stented elephant trunk technique.[1] They thought that it was unnecessary to implant the stented elephant trunk into the distal aorta. They raised interesting points: replace the ascending aorta and the arch and relocate the origin of the supra-aortic vessels very proximally just above the sinotubular junction. A safe and long proximal landing zone would thereby be created to facilitate subsequent endograft repair of the distal aorta (if necessary).

In fact, the fate of the residual distal aorta after acute type A dissection repair is controversial. Even though expansion of the residual aorta after surgical repair is a slow and linear process that makes distal reoperations relatively uncommon, as recommended by their team and others,[2] a recent report demonstrated that hemiarch replacement for acute type A dissection had a high mortality rate compared with total arch replacement combined with stented elephant trunk implantation.[3] In our opinion, this might be associated with the difference of the extent of propagation and involvement of aortic dissection. Thus we divided acute type A dissection into two subtypes: subtype C and subtype S. (1) Subtype C (complex type) is characterized by the primary tear located in the transverse arch or the descending aorta; aneurysm formation in the aortic arch or the distal aorta ($\geq$40 mm); involvement, aneurysm formation, and occlusion of the brachiocephalic artery; or Marfan syndrome. (2) In subtype S (simple type), the primary tear is located in the ascending aorta without the features of subtype C. There was no need to perform total arch replacement.

Subtype C was associated with a higher risk of reoperation using a conventional strategy (limited ascending aortic or hemiarch replacement). Total arch replacement was recommended to decrease the risk of distal reoperation after surgery. If aortic dissection extended beyond the distal arch, a stented elephant trunk was implanted into the distal aorta. Implantation of a surgical stent graft into the distal aorta involved the following: (1) secure the anastomosis; (2) simplify total arch replacement; (3) promote thrombosis of the false lumen in the distal aorta; (4) enlarge the true lumen; (5) and facilitate the later thoracoabdominal aortic replacement, if necessary.

As for the authors' interesting approach, several issues should be raised. Compared with the antegrade intraoperative surgical stent, it is troublesome to deliver the stent graft retrogradely via the femoral artery. Because there is no extravascular graft of the end of the stent graft to be used for sewing, it is difficult to manage if a late distal aortic reoperation is needed. The complications of the endovascular treatment cannot be prevented either.

LiZhong Sun, MD[a]
RuiDong Qi, MD[b]
[a]*Beijing Aortic Disease Center*
Beijing Institute of Heart Lung and Blood Vessel Diseases & Beijing Anzhen Hospital
Capital Medical University
Beijing, China
[b]*Department of Cardiovascular SurgeryTianjin Cardiovascular Institute & Tianjin Chest Hospital*
Tianjin, China

References

1. Sun LZ, Qi RD, Chang Q, Zhu JM, Liu YM, Yu CT, et al. Surgery for acute type A dissection using total arch replacement combined with stented elephant trunk implantation: experience with 107 patients. *J Thorac Cardiovasc Surg*. 2009;138:1358-62.
2. Halstead JC, Meier M, Etz C, Spielvogel D, Bodian C, Wurm M, et al. The fate of the distal aorta after repair of acute type A aortic dissection. *J Thorac Cardiovasc Surg*. 2007;133:127-35.
3. Uchida N, Shibamura H, Katayama A, Shimada N, Sutoh M, Ishihara H. Operative strategy for acute type A aortic dissection: ascending aortic or hemiarch versus total arch replacement with frozen elephant trunk. *Ann Thorac Surg*. 2009;87:773-7.

doi:10.1016/j.jtcvs.2010.01.038

IS A TRANSANNULAR PATCH ALWAYS NECESSARY?

To the Editor:

Congratulations to Brancaccio and colleagues[1] for this valuable study. The reported surgical technique stated that transannular patch plasty was performed in patients with a pulmonary valve Z-score less than –2. However, we have two questions: Did the authors think about the septal excision of trabecula septomarginalis? Could there be a solution without using a transannular patch supposing that this pulmonary stenosis was secondary to ventricular septal defect (VSD)?

We think that the ratio of residual VSD is high because of the technique, not the surgeon. During the repair of VSD, pledgets are left on the right ventricular side (needle is inserted from the right ventricular side of VSD in the classic method). With this method, pressure (pressure gradient between