This strategy of rapid restoration of flow to the ischemic limb with a temporary axillofemoral graft is a simple and potentially beneficial method for limb salvage in ATAD complicated by factors such as prolonged ischemia at presentation or previous sternotomy.

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EDITORIAL COMMENTARY

Early reperfusion for acute type A dissection complicated with distal malperfusion

Arminder S. Jassar, MBBS, and Wilson Y. Szeto, MD

From the Division of Cardiovascular Surgery, University of Pennsylvania, Philadelphia, Pa.

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Address for reprints: Wilson Y. Szeto, MD, Associate Professor of Surgery, University of Pennsylvania School of Medicine, Chief of Cardiovascular Surgery at Penn Presbyterian Medical Center, 51 N 39th St, Heart and Vascular Pavilion, Suite 2A, Philadelphia, PA 19104 (E-mail: wilson.szeto@uphs.upenn.edu).

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Acute type A dissection remains a challenging clinical scenario. Prevalence of previous cardiac surgery in patients presenting with acute type A dissection is approximately 9% to 16% and has been shown to worsen both in-hospital and long-term mortality.^{1,2} Similarly, patients with acute type A dissection who present with malperfusion have increased perioperative and long-term mortality.³⁻⁵ This has led several groups to advocate early reperfusion with either thoracic endovascular aortic repair (Figure 1) or percutaneous fenestration of the dissection flap to restore true-lumen blood flow and subsequent performance of the proximal repair of type A dissection in a delayed fashion once patient has been stabilized.^{6,7} This approach of delayed type A dissection repair may be even more applicable in the setting of a reoperation, since these patients have a lower probability of tamponade and frank rupture than do patients with type A dissection in a nonoperative setting because of adhesions from the previous operations.¹

Patient with acute aortic dissection treated with thoracic endovascular aortic repair.

Central Message

Early reperfusion must be considered in treatment of acute type A dissection with malperfusion.

See Article page e111.

In this report, Hussain and colleagues⁸ used a creative strategy to reperfuse the lower extremity as resternotomy and dissection were being performed. The procedure involves an extra-anatomic circuit to provide early perfusion to the malperfused distal organ bed while at the same time providing arterial inflow for cardiopulmonary bypass and cerebral perfusion during circulatory arrest. Unfortunately, the leg remained ischemic, as discovered by the completion angiogram performed after the dissection repair. It is conceivable that definitive treatment of the lower extremity malperfusion with an

FIGURE 1. Patient with acute aortic dissection before (A) and after (B) thoracic endovascular aortic repair.

angiogram and thrombectomy before embarking on the dissection repair (given the lower risk of rupture in this reoperative situation) could have mitigated the rhabdomyolysis, alleviated the need for fasciotomy, and prevented the postoperative renal failure seen in this patient. Nonetheless, the fundamental concept demonstrated here is the attempt at early aggressive reperfusion to mitigate the deleterious effect of malperfusion. Given that this patient had 2 risk factors (previous cardiac surgery and malperfusion) in addition to an already high-risk surgical scenario, Hussain and colleagues⁸ are to be commended for a favorable outcome in this patient. Also importantly, this report highlights the utility of a hybrid endovascular operating room and the importance of a multidisciplinary aortic team when dealing with acute complex thoracic aortic pathology.

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