In conclusion, Hong and colleagues are to be congratulated for highlighting the evolution of the clinical approach to acute type B aortic dissection.^{10,11} It is likely that clinical trials and regional aortic centers will continue to evolve in concert with advances in imaging and interventions to further improve outcomes for our patients.^{12,13}

References

1. Al-Ghofaily L, Feinman JW, Augoustides JG. Acute aortic dissection: refining contemporary outcomes with the Penn classification for this aortic emergency. *J Cardiothorac Vasc Anesth*. 2020;34:874-6.
2. Dagenais F. Commentary: are the early benefits of thoracic endovascular aortic repair in complicated type B aortic dissection durable through time? *J Thorac Cardiovasc Surg*. April 23, 2020 [Epub ahead of print].
3. Schoenhoff F, Carrel T. Commentary: risk scores to predict aortic events in uncomplicated Stanford type B dissection: simple, simpler, too simple? *J Thorac Cardiovasc Surg*. 2020;159:2184.
4. Wojnanski CM. Commentary: risk of aortic intervention after type B dissection—you cannot win unless you keep score. *J Thorac Cardiovasc Surg*. 2020;159:2187-8.
5. Hong JC, Le Huu A, Preventza O. Medical or endovascular management of acute type B aortic dissection. *J Thorac Cardiovasc Surg*. 2022;164:1058-65.
6. Lombardi JV, Hughes GC, Appoo JJ, Bavaria JE, Beck AW, Cambria RP, et al. Society for Vascular Surgery (SVS) and Society of Thoracic Surgeons (STS) reporting standards for type B aortic dissections. *Ann Thorac Surg*. 2020;109:959-81.
7. Augoustides JGT, Szeto WY, Woo EY, Andritsos M, Fairman RM, Bavaria JE. The complications of uncomplicated acute type-B dissection: the introduction of the Penn classification. *J Cardiothorac Vasc Anesth*. 2012;26:1139-44.
8. Desai ND, Gottret JP, Szeto WY, McCarthy F, Moeller P, Menon R, et al. Impact of timing on major complications after thoracic endovascular aortic repair for acute type B aortic dissection. *J Thorac Cardiovasc Surg*. 2015;149(2 Suppl):S151-6.
9. Clough RE, Nienaber CA. Evidence for and risks of endovascular treatment of asymptomatic acute type B aortic dissection. *J Cardiovasc Surg (Torino)*. 2017;58:270-7.
10. Hossack M, Patel S, Gambardella I, Neequaye S, Antoniou GA, Torella F. Endovascular vs medical management for uncomplicated acute and sub-acute type B aortic dissection: a meta-analysis. *Eur J Vasc Endovasc Surg*. 2020;59:794-807.
11. Munshi B, Doyle BJ, Ritter JC, Jansen S, Parker LP, Riambau V, et al. Surgical decision making in uncomplicated type B aortic dissection: a survey of Australian/New Zealand and European surgeons. *Eur J Vasc Endovasc Surg*. 2020;60:194-200.
12. Tanious A, Wooster M, Giarelli M, Armstrong PA, Johnson B, Illig KA, et al. Positive impact of an aortic center designation. *Ann Vasc Surg*. 2018;46:142-6.
13. Manzur M, Han SM, Dunn J, Elsayed RS, Fleischman F, Casagrande Y, et al. Management of patients with acute aortic syndrome through a regional rapid transport system. *J Vasc Surg*. 2017;65:21-9.

See Article page 1058.

Commentary: Modern management of type B aortic dissection: Perspectives from the house of DeBaakey

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In their article in this issue of the *Journal*, Preventza and colleagues¹ provide an overview of the current state of treatment of type B aortic dissection (TBAD), highlighting the paradigm shifts that have taken place, as well as some of the newer treatment options currently under investigation.

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CENTRAL MESSAGE

Although medical management continues to provide outstanding outcomes in the majority of patients with acute type B aortic dissection, the high incidence of late aortic-related complications has increased interest in preventing these events through earlier intervention.

From the earliest International Registry of Acute Aortic Dissection data, the best outcomes of TBAD therapy have been achieved through medical management and anti-impulse control, with surgical intervention reserved for complications due to the high morbidity and mortality of open surgery. In the current era, endografting has replaced open surgery for acute complicated TBAD in nearly all instances, with acceptable outcomes. By promoting aortic remodeling and preventing aneurysmal degeneration, management of acute and subacute TBADs has progressed beyond just surviving the early phase toward mitigating long-term complications.

The authors correctly identify key issues of contention in the current era, new classification systems, and the term “uncomplicated,” which can now include high-risk features. Unfortunately, the newest proposed nomenclature systems are cumbersome, might not be readily adopted by clinicians outside of the surgical field, and, as the authors note, might not directly correlate with management.² Patients with high-risk features, such as persistent pain and refractory hypertension, are now receiving increasing attention and consideration for surgical intervention.³

Regarding the timing of surgery, particularly in patients with high-risk features, it is generally agreed that the current division of time periods (hyperacute, acute, subacute, and chronic) are useful to delineate various stages of the disease process and denote important milestones and risk profiles for intervention at each time interval. Although the authors note that they prefer to delay these patients until the late subacute phase, more research into the optimal

timing and benefit of surgery is needed before these guidelines can be standardized and widely adopted.

This article provides a succinct overview of several strategies and technical aspects of surgical intervention in the treatment of TBAD, including appropriate endograft sizing, bare metal stenting, use of protocols for spinal drainage and hemodynamic monitoring, and intravascular ultrasound. In addition, we have found transesophageal echocardiography to be invaluable for evaluating retrograde dissection following endograft deployment. Another important concept in the treatment of TBAD patients is the multispecialty nature of management. The best outcomes occur when all treating specialties share common algorithms and communicate effectively to deliver high-quality care.

Although medical management continues to provide outstanding outcomes in the majority of patients, the high incidence of late aortic-related complications has increased interest in preventing these events through earlier intervention. Balancing the decision for earlier interventions versus the risk of complications in both acute and chronic TBAD to prevent late aortic complications represents the next frontier in this disease process.

References

1. Preventza O, Hong JC, Huu AL. Medical or endovascular management of acute type B aortic dissection. *J Thorac Cardiovasc Surg.* 2022;164:1058-65.
2. Lombardi JV, Hughes GC, Appoo JJ, Bavaria JE, Beck AW, Cambria RP, et al. Society for Vascular Surgery (SVS) and Society of Thoracic Surgeons (STS) reporting standards for type B aortic dissections. *Ann Thorac Surg.* 2020;109:959-81.
3. vanBogterijen GHW, Tolenaar JL, Rampoldi V, Moll FL, van Herwaarden JA, Jonker FHW, et al. Predictors of aortic growth in uncomplicated type B aortic dissection. *J Vasc Surg.* 2014;59:1134-43.