# Blunt Traumatic Aortic Transection 

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A46-year-old woman was admitted with blunt chest trauma after a horse-riding accident. Computed tomographic scan revealed an aortic transection with contained rupture (A, left, red arrows) in the region of the aortic isthmus and proximal descending thoracic aorta. She underwent emergent endovascular stent graft ( $\mathbf{A}$, right, red arrow) repair preceded by adjunctive end-to-side carotid-subclavian bypass ( $\mathbf{B}$, blue arrow), because coverage of the origin of the left subclavian artery ( $\mathbf{B}$, red arrow) by the stent was necessary to achieve sealing. Post-operative and 30-day computed tomographic scan showed adequate stent apposition with no endoleak. Aortic injury is a life-threatening complication of blunt chest trauma with a very high pre-hospital mortality (1). The standard treatment has been open surgical repair. Over the last 2 decades, endovascular stent graft technology has rapidly evolved (2). Long-term results of endovascular repair are awaited.

## REFERENCES

1. Parmley LF, Mattingly TW, Manion WC, Jahnke EJ Jr. Nonpenetrating traumatic injury of the aorta. Circulation 1958;17:1086-101.
2. Tehrani HY, Peterson BG, Katariya K, et al. Endovascular repair of thoracic aortic tears. Ann Thorac Surg 2006;82:873-7.
