

# Extended aortic arch repair via simple median sternotomy using a parabronchial approach: a case report

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## Abstract

Surgery for extensive thoracic aortic aneurysms is challenging. We report the case of a young woman with Takayasu's arteritis who developed aortic dissection and was successfully treated with our novel extended arch repair method, which we termed "parabronchial approach". Surgery was performed via a simple sternotomy. The left pulmonary artery was compressed caudally by a surgical assistant arm typically used for coronary artery bypass grafting. This method simplified the creation of a distal anastomosis to the descending aorta behind the left bronchus. Postoperative computed tomography revealed a distal anastomosis at the sixth thoracic vertebra. This parabronchial approach could reduce the frequency of choosing a highly invasive approach and can be a potential minimally invasive approach in cases requiring extensive thoracic aortic aneurysm repair.

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