

# Short Term Outcome Of Thoracic Endovascular Aortic Repair In Patients With Thoracic Aortic Diseases

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## ABSTRACT

### BACKGROUND

Open surgical repair for thoracic aortic diseases is associated with a high perioperative mortality and morbidity. Most of type B aortic dissections are uncomplicated and are medically treated which carries a high mortality rate. Thoracic endovascular aortic repair is the first-line therapy for isolated aneurysms of the descending aorta and complicated type B aortic dissection.

### OBJECTIVE

To test the safety of early thoracic endovascular aortic repair in patients with uncomplicated type B aortic dissection and patients with thoracic aortic aneurysms.

### METHODS

A total of 30 patients (24 men and 6 females; mean age  $59 \pm 8$  years) with uncomplicated type B aortic dissection and descending thoracic aortic aneurysm who underwent endovascular aortic repair in National Heart Institute and Cairo University hospitals were followed up. Clinical follow-up data was done at one, three and twelve months thereafter. Clinical follow-up events included death, neurological deficits, symptoms of chronic mal-perfusion syndrome and secondary intervention. Multi-slice computed tomography was performed at three and six months

after intervention.

### RESULTS

Of the 30 patients, 24 patients had aortic dissection, and 6 patients had an aortic aneurysm. 7 patients underwent hybrid technique and the rest underwent the basic endovascular technique in whom success rate was 100%. Two patients developed type Ia endoleak however both improved after short term follow up. The total mortality rate was 10% throughout the follow-up. Both death and endoleak occurred in subacute and chronic cases, while using TEVAR in acute AD and aneurysm showed no side effects. Early thoracic endovascular aortic repair showed better results and less complications.

### CONCLUSION

Along with medical treatment, early thoracic endovascular aortic repair should be considered in uncomplicated type B aortic dissections and thoracic

**KEYWORDS** TEVAR, Thoracic Aortic Diseases, Aortic aneurysm

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