

Emergent Endovascular Repair of Ruptured Aortic Aneurysms: Midterm Outcomes in a Single Center

Umit Gullu¹, Murat Okten¹, Sahin Senay¹, Muharrem Kocyigit², Hakan Akay¹,
Fevzi Toraman², Hasan Karabulut¹, Cem Alhan¹

¹*Cardiovascular Surgery, Acibadem University, School of Medicine, Turkey*

²*Anesthesiology, Acibadem University, School of Medicine, Turkey*

Objective:

The mortality rate of the conventional open repair for aortic aneurysm ruptures has not improved significantly. Endovascular therapies may offer distinct advantages in these situations. Here in this study, we present our experience with emergent endovascular repair of both abdominal and thoracic aortic ruptures and report early and midterm outcomes

Methods:

Data from all patients (n=96) who were treated with endovascular procedures between 2004 to 2011 were prospectively collected and early-midterm outcomes of the emergency (e) interventions for both abdominal (EVAR) and thoracic (TEVAR) aortic ruptures (n=20) were retrospectively analyzed.

Results:

The mean age was 65±11 years (range: 27-77 years) and 18 patients (90%) were male. Mean follow-up duration was 38± 21.2 months (range=1-67). Thirteen patients treated with eEVAR (65%) and 7 with eTEVAR (35%). One patient who had rupture of aneurysm at arcus aorta was treated with hybrid procedure (eTEVAR+ de-branching). The hospital mortality rate was 20% (n=4) for all cases, 23.0% (n=3) for eEVAR and 14.2% (n=1) for eTEVAR group. One mortality case related to lung cancer was observed in patients who were discharged from the hospital. At the follow-up period, 3 patients (15.0%) had re-intervention.

Conclusion:

The question for leaving a stent in the aorta of a patient for decades still has no clear answer. Re-interventions and the necessity of close follow up are the disadvantages of endovascular procedures. Even if that is the case, we believe that eEVAR/eTEVAR in the acute setting for ruptured aorta in patients with suitable anatomy is a valued and lifesaving option.