

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

A. Ümit Güllü¹, T.D. Burnaz², E.M. Okten¹, Ş. Şenay¹, C. Ariturk¹, F. Toraman³, M. Kocyigit³, S. Yaylancı⁴, E.H. Karabulut¹, C. Alhan¹

¹Acıbadem University School of Medicine, Department of Cardiovascular Surgery, Istanbul, Turkey.

²"Iuliu Hațieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

³Acıbadem University School of Medicine, Department of Anesthesiology, Istanbul, Turkey

⁴Acıbadem University School of Medicine, Emergency Department, Istanbul, Turkey

Abstract

Objective: Endovascular therapies may offer distinct advantages in acute aortic syndromes. In this paper, 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 by endovascular procedures between 2004 to 2012 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 analysed.

Results: The mean age was 65±11 years (range: 27-77 years) and 18 patients (90%) were male. Mean follow-up duration was 28 ± 21.2 months (range=1-57). Thirteen patients were treated by eEVAR (65%) and 7 by eTEVAR (35%). One patient who had a rupture of the aneurysm at arcus aorta level was treated by hybrid procedure (eTEVAR+ debranching). The hospital mortality rate was 20% (n=4) for all cases, 23.0% (n=3) for eEVAR and 14.2% (n=1) for eTEVAR. In the follow-up period, 3 patients (15.0%) had reinterventions.

Discussion: Reinterventions 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 of ruptured aorta in patients with suitable anatomy is a lifesaving option.

Key words: acute aortic syndromes, endovascular treatment

Corresponding author: Tania-Doris Burnaz

G-ral Ghe. Magheru Street, bl. 367, ap. 28, 310340, Arad, Romania

E-mail: doris_burnaz@yahoo.com