Traumatic aortic rupture (TAR). Thirty years of experience.

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Introduction: Over the past 30 years 72 patients were treated for traumatic aortic rupture (TAR) at the University Hospitals Leuven. During this period diagnostic workup and therapy have changed leading to improved outcome. The introduction of endovascular therapy (TEVAR) in 2000 was a mile stone.

Methods: We retrospectively reviewed the diagnostic workup and management of all these patients and compared outcome before and since the era of endovascular therapy.

Results: Between 1980 and 2010 72 patients were treated for TAR with a mean age of 38 years (range 14-76). Forty-eight patients (67%) were treated by open surgery, 24 (33%) by TEVAR. In the open surgery group mortality was 16.7%. Paraplegia occurred in 8.3 % of patients. In the TEVAR group mortality was 4.2%. No paraplegia occurred. Diagnostic workup consisted of RX thorax and arteriography in the early period whereas in the more recent period CT scan and transoesophageal echography werd preferred.

Conclusions: Based on this experience guidelines for decision making in the management of TAR have been adapted.