

**14. RUPTURED ABDOMINAL AORTIC ANEURYSM: A
RETROSPECTIVE ASSESSMENT OF OPEN VS.
ENDOVASCULAR REPAIR**

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Background : Aortic Stent graft repair has recently been applied as a potentially effective alternative therapy for ruptured infra renal abdominal aortic aneurysms (r AAA).

Objective : Retrospective assessment of outcome in a continuous series at a single institution of patients with ruptured infra - renal abdominal aortic aneurysms treated by either open or endovascular repair.

Methods : Between October 1999 and July 2004 a total of 24 patients were treated at University of Alabama Hospital for ruptured infra renal abdominal aortic aneurysms. They were treated by either open procedure (n=15) or endovascular stent graft repair (n=9). Outcome parameters included mortality, morbidity, procedure time, blood loss and length of stay. Since July 2000, all patients who were hemodynamically stable were evaluated for EVAR with CT imaging. EVAR was used whenever the CT anatomy was deemed suitable and experienced OR personnel were available. Considering the 15 patients receiving open repair, six patients were hemodynamically unstable, three patients had unsuitable anatomy and six patients had open repair based upon the preference of the attending surgeon.

Results : Treatment groups were similar with regard to age, gender, and aneurysm size. Morbidity and mortality were also similar in both groups, while blood loss, procedure time and length of stay were shorter for EVAR. Age (mean 70.8 years in EVAR vs. 72.2 years for Open), Gender (Men 71% vs. 75%), AAA size (Mean 6.7 cm vs. 6.4 cm), early mortality (22% vs. 26%) and major morbidity (56% vs. 53%) were similar in both groups. Blood loss difference between the two groups was statistically significant ($p=0.0001$).

Conclusion : In this retrospective review of a continuous series of 24 patients at a single institution confirms the short-term viability of EVAR for ruptured infra renal AAA when anatomy is suitable and patient and facility conditions are favorable. The need for a prospective study is further established.