

**Abstract 7****Inflammatory Abdominal Aortic Aneurysm Treated by Endovascular Stent Grafting**

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Inflammatory abdominal aortic aneurysms (IAAA) present both a diagnostic and therapeutic dilemma. This problem can be difficult to define preoperatively by either ultrasound or arteriography. However, the diagnosis can often be made by computed tomography. Standard open surgical management may be complicated due to surrounding dense peri-aneurysmal inflammation. This inflammatory response increases risk of injury to the duodenum, left renal vein and ureters. Transperitoneal aortic exposure for repair of IAAA is hazardous and retroperitoneal exposure while minimizing risk of bowel or renal vein injury still exposes the patient to the risk of ureter injury. Alternatively, endovascular repair of an IAAA with a stent graft can definitively effect aneurysm exclusion and potentially avoid injury to vital structures in an inflamed operative field. However, the role of endovascular stent grafts in the management of IAAA's remains speculative and undefined. Furthermore, long-term durability of stent grafts and their ability to effect regression of peri-aneurysmal retroperitoneal inflammation are unknown.

We present a patient with an infrarenal IAAA who was referred for definitive repair after abandonment of an attempt at open transperitoneal aneurysm repair. Arterial anatomy was suitable for a stent graft. The patient's IAAA was successfully treated with an Ancure™ (Guidant/EVT) bifurcated endograft. Immediate post-deployment arteriography demonstrated no endoleak and the patient was discharged to home two days after aneurysm repair. CT scan and duplex ultrasound two weeks after stent grafting continue to show no endoleak and demonstrate minimal-to-mild decrease in the surrounding peri-aneurysmal inflammatory response. Six-month follow-up CT and ultrasound data will be available in December 2000.