"Fast-Track" Abdominal Aortic Aneurysm Repair

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The "open" repair of abdominal aortic aneurysm (AAA) continues to evolve, with incorporation of less invasive methods for surgical exposure and the use of patient care pathways, for shorter hospital stays. In a consecutive series of 30 patients with infrarenal AAA, a "fast-track" hospital care pathway was implemented that included the following: AAA exposure via a limited (10–15 cm) retroperitoneal incision, use of self-retaining retractor and special vascular clamps/instruments, and prosthetic graft endoaneurysmorrhaphy. Excellent anatomic exposure for graft implantation was achieved with an average operative time of 175 minutes. Use of oral metoclopromide and patient-controlled epidural analgesia resulted in patient ambulation and oral diet on postoperative day 1. Average length of hospital stay was 3.6 days (range, 3–7 days), and no patient required readmission for AAA repair-related or gastrointestinal problems. One patient died (30-day mortality rate of 3.3%) caused by delayed recognition of a splenic injury, and 1 patient sustained an intraoperative ureter injury that was repaired and stented. Although stent graft exclusion for AAA repair has become popular, the major advantages of endovascular therapy, such as shorter ICU and hospital stays, earlier dietary feeding, and reduction in postoperative morbidity, can also be achieved by using minimal incision exposure for AAA interposition grafting combined with traditional hand-sewn vascular anastomoses. Fast-track AAA repair is applicable to the majority of patients with infrarenal AAAs, and vascular surgeons can easily master the technique of "limited" incision of retroperitoneal exposure. This approach avoids the concerns of endovascular stent-graft durability and the mandatory vascular imaging follow-up to identify endoleak development and AAA enlargement.