**Early Outcomes of Deliberate Nonoperative Management for Blunt Thoracic Aortic Injury in Trauma**

Caffarelli AD, Mallidi HR, Maggio PM, et al. J Thorac Cardiovasc Surg 2010;140:598-605.

**Conclusion:** Nonoperative management of carefully selected patients with blunt thoracic aortic injury is safe in the short-term, but serial imaging and long-term follow-up are necessary.

**Summary:** Early operative repair has been standard management of blunt thoracic aortic injuries, and delayed repair has also become accepted in recent years. In this article, the authors go a step further and report deliberate nonoperative management of blunt thoracic aortic injury. Over the last decade, with improved prehospital care and imaging, a spectrum of thoracic aortic injuries can be identified. Whereas, it has now become common to treat blunt thoracic aortic injury with thoracic endovascular aneurysm repair, the authors have expressed reluctance to implant endografts in young patients with perhaps 5 or 6 decades more years of life expectancy. They have therefore adopted a deliberate strategy of nonoperative management of selected patients with blunt thoracic aortic injury. This strategy includes aggressive negative inotropic therapy, serial imaging, and close clinical observation. This report presents their results of deliberate nonoperative management of blunt thoracic aortic injury. This was a retrospective record review. The patients treated with nonoperative management for blunt thoracic aortic injury were analyzed for survival, evolution of aortic injury, and treatment failure. There were 53 patients (average age, 45 years) who presented to Stanford University School of Medicine Emergency Department with blunt thoracic aortic injury. Nearly three-quarters of these patients were transferred from other hospitals. Twenty-nine of 53 patients underwent planned nonoperative management of their blunt thoracic aortic injury. In-hospital survival for these 29 patients was 93%. No death was secondary to an aortic injury. At a median of 1.8 years (range, 0.9-7.2 years) survival was 97%. Nonoperative management failed in one patient, who underwent open repair. Serial imaging was performed in all patients (average, 107 days; median, 31 days). Stable aortic injuries without progression were noted in 21 patients, and 5 had resolution of their aortic injury. Eight patients were lost to follow-up. All patients had Social Security Numbers, and none were listed in the Social Security Death Index and, therefore, are presumed alive.

**Comment:** Another so-called principle of trauma management has now come under question. Fifteen years ago, anyone advocating delayed and, now even nonoperative, management of thoracic aortic injury would have been hooted out of the room. The Stanford surgeons are to be congratulated for their continued contributions to the management of thoracic aortic disease and their willingness to look at the patients in their practice, and based on these observations, to then buck the current trend to reflexively treat thoracic aortic injuries with endovascular repair. Of course this is one practice where almost 75% of the patients with thoracic injury were received as transfers, and the patients are "selectively" managed. However, this is also likely the case in most centers that treat thoracic aortic injuries, and one can strongly suspect that the author's observations will be transferable to other centers as well.

**Long-Term Results of Endoscopic Versus Open Saphenous Vein Harvest for Lower Extremity Bypass**

Julliard W, Katzen J, Nebozny M, et al. Ann Vasc Surg 2011;25:101-7.

**Conclusion:** For lower extremity bypass, there is inferior long-term patency of the bypass when great saphenous veins (GSV) are harvested with endoscopic techniques vs open techniques.

**Summary:** For lower extremity bypass surgery GSVs are traditionally harvested with open visualization of the vein. Early series of endoscopic harvest demonstrated similar lower extremity bypass patency, with decreased wound complications in patients operated on with endoscopic vs open vein harvest (Jordan WD, et. al; J Vas Surg 2001;34:434-9; Illig KA, et al; Ann Vasc Surg 2001;15:104-9). A more recent series, however, found decreased graft patency after endoscopic harvest, without improvement in wound complications in patients undergoing lower extremity bypass (Pullat R, et al; J Vasc Surg 2006;44:289-95). In a recently reported large series of patients undergoing coronary artery bypass grafting, there was decreased graft patency as well as decreased survival rates with endoscopic vs open harvest of the GSV (Lopes RD, et al; N Engl J Med 2009;361:235-44). On the basis of these more recent series, the authors analyzed their results of lower extremity vein bypass over 8.5 years with endoscopic vs open vein harvest. Of the 363 patients in the series (average age, 67 ± 24), 170 underwent endoscopic vein harvest, and 90% of the endoscopic procedures were performed using a non-insufflation technique with clips rather than cautery to obtain hemostasis of the side branches. Open harvest of the GSV by continuous or skipped incisions was used in 193 patients. Tissue loss was present in 48% of the patients, and there were no differences in indications for surgery between the patients undergoing endoscopic vs open harvest of the GSV. Median follow-up was 35.1 months (range, <1-105 months). Primary patency rates were worse in the endoscopic vein harvest group compared with the conventional harvest group at 6 months (63.3% ± 4% vs 77.3% ± 3%), at 12 months (50.4% ± 4.2% vs 73.7% ± 3.6%), and at 36 months (42.2% ± 4.5% vs 59.1% ± 4.9%; $P < .001$ for all). Limb salvage and survival were identical. There were no differences in wound complications or lengths of stay between patients undergoing endoscopic vs open GSV harvest.

**Comment:** The results of the study show overall inferior long-term patency for endoscopic harvested GSVs used in lower extremity bypass. These authors were among the first to report potential benefit of endoscopic harvested veins for lower extremity bypass. There are to be congratulated for the courage to report updated results that conflict with their earlier observations. The results of the current study may be due to many factors. The authors sometimes use endoscopic techniques below the knee, and this may lead to inferior results. In addition, preoperative vein mapping with marking the course of the GSV on the skin may result in decreased wound complications by less undermining of flaps in the current compared with earlier series. The authors found little difference in patency between endoscopic and open harvest in patients treated for claudication and in nondiabetic patients. Therefore, there may be reason not to completely abandon endoscopic harvest but rather to restrict the technique to nondiabetic patients treated for claudication and to limit endoscopic harvest to the above knee GSV.

**Preoperative Angiography and Transarterial Embolization in the Management of Carotid Body Tumor: A Single-Center, 10-year Experience**

Li J, Wang S, Zee C, et al. Neurosurgery 2010;67:941-948.

**Conclusion:** Preoperative embolization of carotid body tumors (CBTs) is safe and effective to facilitate surgical resection.

**Summary:** Larger CBTs, classified as Shamblin class II (those that partially surround the internal and external carotid arteries) and Shamblin class III (those that completely surround the carotid bifurcation and/or the internal carotid artery) can be difficult to remove, and excessive blood loss is possible. Some surgeons therefore advocate preoperative embolization of larger, Shamblin class II and III CBTs. Others believe preoperative embolization is unnecessary and has the added risk of neurologic complication. The authors present a series of 62 patients with Shamblin class II or III tumors that were operated on during a 10-year period in their institution. They divided the patients into two groups. The first group (group I) had preoperative embolization and included 33 patients with 11 class II and 25 class III lesions. Group II had surgery without preoperative embolization and included 29 patients with 9 class II lesions, and 21 class III lesions. The two groups were compared with respect to mean intraoperative blood loss, operation time, postoperative hospital stay, and clinical complications. The authors felt that angiography after embolization demonstrated complete CBT devascularization in 76% of the lesions and partial devascularization in 24%. Mean intraoperative blood loss was 354 ± 334 mL in group I vs 656 ± 498 mL in group II ($P = .008$). The mean operation time was 170 ± 75 minutes in group I vs 224 ± 114 minutes in group II ($P = .034$). Hospital stay was prolonged in both groups, but was still less in group I (8.0 ± 2 days) than group II (9.5 ± 3.5 days; $P = .042$). Transient ischemic attacks occurred in 10.3% of patients in group II vs in 3% of patients in group I. Cranial nerve injuries occurred in 13.8% of patients in group II and were not observed in group I.

**Comment:** This is the largest published series of CBTs operated on with preoperative embolization. Apparently, although not specifically mentioned, there were no significant complications associated with the preoperative embolization, and the procedure was successful most of the time. It is unclear how the patients were allocated to group I or group II, with allocation likely on the basis of surgeon preference. It is also unclear whether inclusion into group I or group II changed over time and whether the same proportion were operated by the same surgeons in group I and group II. Therefore, the benefits of preoperative embolization in terms of operative time and blood loss, although potentially ascribed to the procedure, may also be surgeon-specific. Nevertheless, it does appear that preoperative embolization of larger CBTs can be done with technical success and minimal complications.

**Prognostic Significance of Deep Vein Thrombosis in Patients Presenting with Acute Symptomatic Pulmonary Embolism**

Jimezez D, Aujesky D, Diaz G, and the RIETE Investigators. Am J Respir Crit Care Med 2010;181:983-91.

**Conclusion:** In patients with an acute symptomatic pulmonary embolism (PE), a concurrent diagnosis of deep venous thrombosis (DVT) is an independent predictor of increased risk of death within 3 months after the PE diagnosis.

**Summary:** The 3-month mortality rates after an objectively confirmed diagnosis of acute PE vary from 1.4% to 17.4%. Variability in mortality likely illustrates differences in the clinical spectrum of patients with PE. Early deaths in patients with PE are secondary to PE-associated complications. Underlying medical problems cause most late deaths (Conget F, et al; Thromb Haemost 2008;100:937-42). Up to 61% of patients with acute PE