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high-intensity statins following revascularization whenever possible.

From the Society for Vascular Surgery

Transcarotid artery revascularization can safely be performed with regional anesthesia and no intensive care unit stay

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Veena Mehta, MD a,b,*, Peyton Tharp, BS b, Courtney Caruthers, BS b, Agenor Dias, MD c, Mathew Wooster, MD d
a Division of Vascular Surgery, Department of Surgery, Harbor-UCLA Medical Center, Torrance, CA
b College of Medicine, Medical University of South Carolina, Charleston, SC
c Division of Vascular Surgery, Department of Surgery, Medical University of South Carolina, Charleston, SC

departmental protocol. Anesthetic management was therefore decided perioperatively. Patients were transferred to a postanesthesia care unit for 2 hours followed by the step-down unit, to a postanesthesia care unit for 4 hours followed by the floor, or alternatively transferred to the ICU. Intravenous (IV) blood pressure medications could be administered at all environments except the floor. Recovery location and length of stay were recorded.

Results: A total of 83 patients underwent TCAR during the study period. The mean age 72 ± 9 years and 59% were male. Thirty-six percent were symptomatic. RA was used for 84% with none converted to general anesthesia (GA) intraoperatively. Postoperatively, 7 of the 83 patients (8%) included in this study were monitored in an ICU overnight (decided perioperatively), mostly for patients with prior neurological symptoms, but in 1 case for postoperative neurological event and in another owing to pulseless electrical activity arrest. Six patients required IV antihypertensives and eight required IV vasoactive support postoperatively. The mean length of ICU stay was 3.7 ± 5.1 days. The mean length of hospital stay for all patients was 2.4 ± 3.3 days. The length of stay for patients undergoing TCAR with GA was higher than those undergoing TCAR with RA (4.2 ± 4.9 days vs 1.4 ± 1.2 days, respectively; P = .066). The incidence of stroke, death, and myocardial infarction was 2.4%. There was one postoperative stroke considered to be a recrudescence of prior stroke, and one respiratory arrest fatality in a frail patient with neck hematoma both of whom were treated under GA.

Conclusions: Using perioperative care protocols, TCAR can safely be performed while avoiding both GA and an ICU stay in most patients.

From the Midwestern Vascular Surgical Society

Optimizing the diagnostic approach of functional popliteal artery entrapment syndrome

Presented at the Forty-fifth Midwestern Vascular Surgical Society annual meeting, Chicago, Illinois, September 9-11, 2021.

Presented at the Wisconsin Surgical Society annual meeting, Kohler, Wisconsin, November 6-9, 2021.

Courtney Morgan, MD a,*, Andrew Huang, BA, William Turnipseed, MD b
a University of Wisconsin School of Medicine and Public Health, Madison, WI
b Kohler, Wisconsin, November 6-9, 2021.

Objective: Functional popliteal artery entrapment syndrome (fPAES) is an underdiagnosed and undertreated etiology of atypical claudication. Symptoms of fPAES include deep posterior muscle cramping and pain with exercise and, unlike anatomic PAES, there are seldom vascular complications. Common noninvasive diagnostic modalities include ankle-brachial index, arterial duplex Doppler ultrasound (DUS) examination, and cross-sectional imaging such as magnetic resonance angiography (MRA). Entrapment can be difficult to reproduce during diagnostic testing, requiring provocative maneuvers. Because we believed different provocative maneuvers provide different diagnostic efficacy, we sought to optimize our diagnostic approach to fPAES.

Methods: We performed a retrospective review of patients before and after optimizing our noninvasive imaging protocol comparing patients with fPAES versus other atypical claudicants with chronic compartment syndrome.

Results: Arterial DUS examination and exercise ankle-brachial index were important components of our protocol with a significant decrease in systolic posterior tibial blood pressure of —14 mm Hg after exercise, whereas nonentrapment release patients had an overall increase of 8 mm Hg (P = .006). Arterial DUS examination of the distal PA with forced plantarflexion demonstrated a trend toward an increase in the measured velocity ratio, especially in the middle and distal PA. MRA with stressed plantar flexion findings were positive in 6 of 11 patients with fPAES, with false negatives likely owing to patients’ inability to maintain a provocative position for the duration of the MRA.

Conclusions: Diagnosing fPAES is challenging owing to a lack of standardized diagnostic testing and provocative maneuvers. Different maneuvers demonstrated varying diagnostic yields for fPAES. Exercise ABIs were the most reliable vascular laboratory test to detect changes attributable to fPAES and to distinguish it from chronic compartment syndrome. Segmental PA DUS examination seems to be promising as a means of detecting PA