

Cardiovascular Update

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A newsletter from the BayCare Cardiovascular Service Line



Cardiovascular CME Conferences a Success

This fall, we hosted two well-attended cardiovascular CME conferences. These events support an open and collaborative learning environment that furthers the level of cardiovascular knowledge across the BayCare clinical community, broadening the ability to positively impact the lives of our patients.

In September, St. Joseph's Hospital sponsored the Atrial Fibrillation Symposium in Tampa, focusing on the latest innovations in the treatment of atrial fibrillation including surgical and medical management of AF, catheter-based management of paroxysmal AF, stroke prophylaxis, AF epidemiology and permanent AF management. Faculty presenting on these topics included Dr. James Edgerton, Dr. Ali Khojnejhad, Dr. William Boedefeld II, Dr. Wilber Su, Dr. Venkata Sagi, Dr. Margot Vloka, Dr. Kevin Makati, Dr. James Irwin and Dr. Andrew Sherman.

Morton Plant Hospital hosted Changing Frontiers in Cardiovascular Disease in Palm Harbor, touching on a range of cardiovascular topics including the heart-healthy diet, women and heart disease, cardiogenic shock, adult congenital heart disease, structural heart disease and advanced heart failure. Presenters at this conference included Dr. Mahesh Amin, Dr. Steven Masley, Dr. Laura Mosher, Dr. Vanessa Lucarella, Dr. Saihari Sanadanan, Dr. Jeremy Ringwald, Dr. Joshua Rovin and Dr. Leslie Miller.



Cutting-Edge Carotid Intervention at St. Anthony's Hospital

By David W. Kohl, MD



David W. Kohl, MD

Twenty years ago, my dad had a left carotid endarterectomy with a Dacron velour patch placed in the internal carotid. It was his first episode of vascular care, which went on to include CABG, coronary and subclavian stenting, and contralateral carotid surgery.

Last December, he called me to report a new mass in his left neck and difficulty swallowing. A house call confirmed a new large pulsatile mass in the left neck. A carotid ultrasound the next day at Bay Area

Heart Center confirmed a carotid pseudoaneurysm (Figures 1 and 2). Extracranial carotid aneurysms are uncommon, accounting for only 1 percent of all arterial aneurysms and 4 percent of peripheral aneurysms. Both true and false carotid aneurysms occur, and pseudoaneurysm associated with a prior patch is not uncommon in this admittedly unusual problem. Repair of extracranial carotid artery aneurysm represents 0.2 to 5 percent of carotid procedures depending on the reporting institution.



Dr. David Kohl and his dad Mr. Carl Kohl

He was brought promptly to St. Anthony's for angiography and intervention. He was felt to be at risk for fatal hemorrhage into the neck. Initial obstacles including marked right iliac tortuosity and difficult access to the left common carotid due to a type III aortic arch were overcome, and angiography confirmed a contained rupture of the anterior wall of the left internal carotid artery (Figures 3 and 4). In most series, open surgical repair is selected for true aneurysms, infected aneurysms and larger aneurysms causing mass effects. At age 91, and with advanced COPD, my dad was clearly not a good surgical candidate. Endovascular repair was the treatment of choice.



Dr. Amit Srivastava

Dr. Amit Srivastava was able to coil the left external carotid to prevent endoleak, and then place an 8mm x 100mm Viabahn heparin-coated PTFE stent graft into the left common carotid proximally, extending into the left internal carotid distally, using distal embolic protection, with an excellent angiographic result (Figure 5). My dad was discharged home the next day, and 10 months later is living independently at age 92.

Continued on page 3

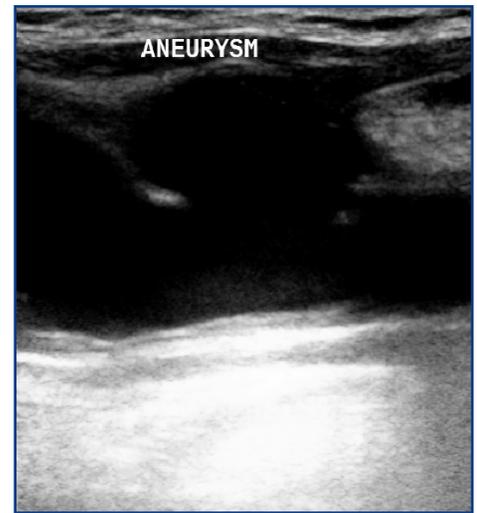


Figure 1

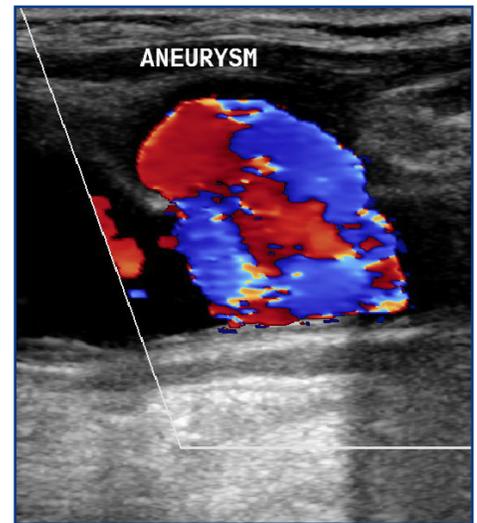


Figure 2



Figure 3

The end of the story is that CMS declined to pay for the carotid ultrasound, because the author of this case report had failed to make a note justifying the test before it was performed, as the diagnosis was suspected during a house call.

The treatment of carotid artery disease has been in rapid evolution in recent years. The much more common problem of carotid artery stenosis has traditionally been treated with carotid endarterectomy, which is a very effective treatment. In 2010, the Carotid Revascularization Endarterectomy versus Stenting Trial (CREST) randomized 2,502 patients to endarterectomy (CEA) versus stenting (CAS). The primary endpoints of death, MI or stroke was not significantly different; 6.8 percent for CEA and 7.2 percent for CAS. Stroke was more frequent with CAS, and MI was more common with CEA. Thus, for most patients today, the option of surgery or stenting for carotid disease is based on choice and other clinical factors, such as risk of anesthesia, previous surgery or irradiation, or restenosis after prior CEA. Cautions regarding stenting include unfavorable anatomy, and unstable carotid or aortic plaque.

Because valid debate about best practices for carotid disease continue, the CREST-2 Trial was initiated in 2014. This is two multicenter, randomized trials of carotid revascularization and intensive medical management versus medical management alone in patients with asymptomatic, high-grade carotid stenosis. One trial will randomize patients in a 1:1 ratio to endarterectomy versus no endarterectomy, and another will randomize patients in a 1:1 ratio to carotid stenting with embolic protection versus no stenting. Medical management will be uniform for all randomized treatment groups and will be centrally directed. Enrollment began in December 2014, and the estimated primary completion date is December 2020. St. Anthony's is an enrollment center for CREST-2, with Dr. Srivastava as the principal investigator.

St. Anthony's has emerged as a cutting-edge center within BayCare for the diagnosis and management of complex peripheral arterial and carotid disease. A multidisciplinary approach is favored, with close cooperation between primary physicians, diabetologists, endovascular specialists, vascular surgeons and wound care experts.



Figure 4

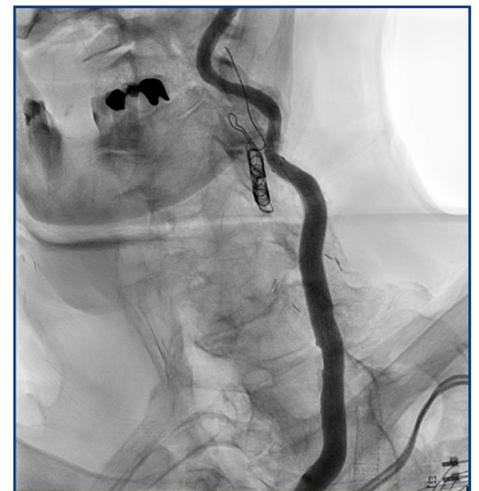


Figure 5

References:

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