Thoracic-Aorta Endografts Expand Repair Options

BY MITCHEL L. ZOLER
Philadelphia Bureau

PONTE VEDRA BEACH, FLA. — Now that the first thoracic-aorta endograft is on the United States market, a revolution has begun in managing thoracic-aorta aneurysms and dissections.

"This is a big deal. Dramatic changes are taking place in managing thoracic-aorta diseases," Alan B. Lumsden, M.D., commented at the annual meeting of the Society for Cardiovascular Angiography and Interventions.

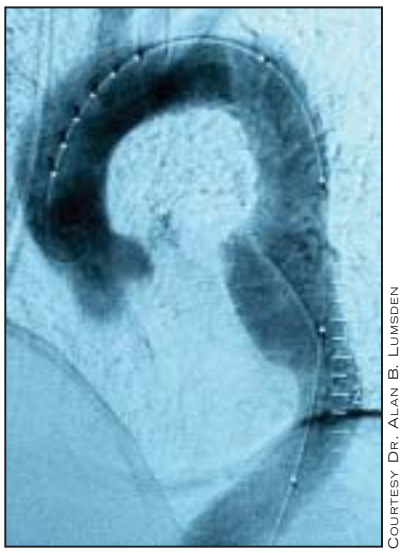
The volume of potential endovascular thoracic-aorta repairs "may be even bigger than for abdominal aortas," said Dr. Lumsden, chief of the division of vascular surgery and endovascular therapy at Baylor College of Medicine in Houston.

On March 23, the Food and Drug Administration approved the Gore TAG endoprosthesis for repair of aneurysms in the descending thoracic aorta. Several additional endoprostheses are in development, and physicians also are developing new ways to expand the types of patients who are candidates for receiving these devices.

Thoracic-aorta aneurysms appear to be less prevalent than abdominal-aorta aneurysms, but thoracic defects also are underdiagnosed. Current prevalence numbers are 10.4/100,000 people. The risk factors for both abdominal and thoracic aneurysms largely overlap. The incidence of thoracic aneurysms increases markedly as people age, and the incidence also seems to be increasing overall in the United States, Dr. Lumsden said.

Most patients with thoracic-aorta aneurysms are asymptomatic; the defects are picked up incidentally in chest x-rays and CT scans. The most common symptom is pain in the shoulders or back.

Like abdominal-aortic aneurysms, the risk of rupture in thoracic aneurysms rises with the size of the aneurysm. Surgical repairs usually have not been done until the aneurysm reached about 6 cm in diameter because of the high rate of surgical complications. In patients without Marfan's syndrome, an ascending thoracic aneurysm usually has been repaired when it reached 5.5 cm in diameter, and a descending thoracic aneurysm has been repaired when it reached 6.5 cm. In patients with Marfan's syndrome, the thresholds for repair have usually been scaled back by 0.5 cm.



COURTESY DR. ALAN B. LUMSDEN

This thoracic-aorta aneurysm was repaired with use of an endograft.

Now that an endovascular repair device is routinely available, the types of patients who are eligible for repair will likely shift, Dr. Lumsden said. Endovascular repair already is the treatment of choice for symptomatic patients and those with a risk of an impending rupture. But increasingly, endovascular repairs also will occur in more complicated aneurysm patients, as well as in patients with uncomplicated aortic dissections.

Several recent reports have documented new types of surgical procedures that have "increased the landing zone" for endovascular stenting. "In the past, we were limited by the location of the celiac, subclavian, and carotid arteries, but now there are good ways to move those around," he said. ■

Patients Err in Warfarin Adherence 22% of Days

BY MIRIAM E. TUCKER
Senior Writer

WASHINGTON — Patients' adherence to warfarin therapy should be monitored on a regular basis and not just at the beginning of therapy, Stephen E. Kimmel, M.D., reported in a poster at a conference on cardiovascular disease epidemiology and prevention sponsored by the American Heart Association.

Previous data suggest that about 50% of patient time on warfarin is spent either under- or overcoagulated. Physicians often attribute this to nonadherence, although this has never been rigorously investigated, Dr. Kimmel said at the conference, also sponsored by the National Heart, Lung, and Blood Institute.

The prospective cohort study by Dr. Kimmel and his associates at the University of Pennsylvania, Philadelphia, was conducted at three centers (a university hospital, a veteran's hospital, and an anticoagulation clinic). Electronic monitoring devices (microelectrical mechanical systems, or EMS caps) were used to measure the exact time and date each time a pill bottle was opened. Of 145 patients aged 25-85 years who were newly prescribed warfarin, 70% were male, 55% were African American, and 39% were white.

Over 12 months, patients took the correct dose on 78% of the days, took no pills on 19% of days, and took an extra pill on 3% (it was assumed that one pill was taken per bottle opening). There were no significant differences in adherence behavior by age, race, or clinic site. However, men were more likely than women to be overadherent, they reported.

Patient adherence waned over the first 6 months, from 83% in month 1 to 76% in month 3 to 73% in month 6. After that, however, adherence rebounded up to 78% at month 9 and 82% by 1 year. This may be due to a dropout effect, differential adherence by indication, or perhaps differential clinician patterns of patient counseling, the investigators speculated.

Interestingly, the clinicians' ability to discern whether a patient was adherent was only slightly statistically better than chance. Among the patients who took the correct dose on less than 50% of days, 14% had been labeled "adherent" by the clinician.

On the flip side, they labeled as "nonadherent" 81% of patients who took the correct dose on more than 50% of days, and 59% of those who got it right on more than 70% of days. ■

Patients Need Not Stop Clopidogrel for Surgery

WASHINGTON — Patients on long-term clopidogrel treatment don't need to stop the drug before surgery, Richard E. Kuntz, M.D., said at a meeting sponsored by the Cardiovascular Research Institute at Washington Hospital Center.

"There is growing experience that it's safe to perform surgery on a patient taking clopidogrel. At our institution, surgeons will operate on these patients. There is no significant difference in morbidity and mortality" during surgery, said Dr. Kuntz, a cardiologist at Brigham and Women's Hospital in Boston

"Surgeons make more of a big deal about clopidogrel than they need to," he added.

This approach to dealing with patients on long-term treatment with the antiplatelet drug clopidogrel (Plavix) was endorsed also by Ron Waksman, M.D., of the division of cardiology at the Washington Hospital Center. "If we push our surgeons, they'll do surgery without waiting to stop clopidogrel," said Dr. Waksman, who chaired the meeting.

The issue of when to stop clopidogrel recently became critical for patients who take the drug after they have received drug-eluting coronary stents. A report last year detailed four anecdotal cases of patients who developed clinically significant coronary thrombosis within a drug-eluting stent after their clopidogrel and aspirin regimens were stopped (Lancet 2004;364:1519-21). In three of these cases, patients had stopped their antiplatelet medications before surgery.

These reports have made experts wary about stopping aspirin and clopidogrel in their patients who have received drug-eluting stents.

Although standard practice when placing drug-eluting coronary stents is to treat patients with clopidogrel for 2-3 months (for sirolimus-eluting stents) or 6 months (for paclitaxel-eluting stents), Dr. Kuntz recommended continuing the drug even longer.

To prevent stent thrombosis, patients with a drug-eluting stent should continue clopidogrel "as long as possible, as long as they can afford it," he said.

—Mitchel L. Zoler