

Idaho State Journal, Thursday, May 29, 2008 – by John Bulger (2 pages)

Help for a steady beat

New stent graft allows aorta repair with fewer complications

POCATELLO — Dr. Jacob De-LaRosa walked out of a Portneuf Heart and Vascular Center operating room Wednesday morning after performing a 45-minute procedure that would have taken three hours just a few weeks ago. More importantly, his patient is scheduled to leave Portneuf Medical Center after one night's stay. "He'll go home tomorrow instead of being in the hospital for a week," DeLaRosa said. "It's a huge, huge difference."

DeLaRosa treated an abdominal aortic aneurysm, a procedure he and Dr. Julio Vasquez have performed countless times. However, beginning last week, the two have been able to use a new stent graft that was recently approved by the Food and Drug Administration. "We put three in last week." De-LaRosa said.

Dr. Jacob DeLaRosa, left, and Dr. Julio Vasquez display the stent they use to treat abdominal aortic aneurysms at PMC's Heart and Vascular Center.



The aorta is the body's largest artery. It descends from the heart through the abdomen before branching into the two femoral arteries of the legs. The abdominal portion of the aorta is the most prone section to the ballooning and weakening of the artery wall.

If the artery bursts, mortality rates are between 50 and 60 percent, according to DeLaRosa. However, if the aneurysm is addressed by surgery, the mortality rate drops to less than 2 percent.

The use of grafts to fortify the bulging portion of the artery has been commonplace for years. Originally, an incision was made midline on the abdomen from the sternum to the navel region. The aorta was "filleted" open and the graft sewn into place.

A less invasive procedure came about with endovascular insertion. This involves the insertion of a long, narrow tool at the groin area which is threaded up through the femoral artery into the aorta.

When the tool is properly situated, the sheath is retracted, leaving behind a stent formed of stainless steel wire 0.018 inches in diameter and arranged in a closed zig-zag pattern. The lattice expands many times its original diameter, pushing its Gore-Tex or polyester material snugly against the vessel wall.

The stent used for abdominal aortic aneurysms looks much like the vessel at the branch area. It has a large portion and divides into two narrower tubes. However, the endovascular insertion had limitations when

the aneurysm became too large. The stent could not expand adequately in the aorta, or neck portion. In that situation, the surgeon had to open the patient and slice into the artery to sew in a graft.

The new abdominal stent graft approved by the FDA has the capability to expand at the top into a larger, funnel shape, obviating the need for the invasive surgery.

The endovascular procedure avoids the typical four- to five-day shutdown of the gastrointestinal system common in the invasive procedure, which lengthens the hospital stay significantly. It also avoids the risk of incisional hernias.

More importantly to patients, it requires a 1 centimeter incision as opposed to a 24 centimeter cut down the belly.

DeLaRosa informed patients recently of the new, less-invasive option.

“They couldn’t wait,” he said. “It’s either this or cut you open.”

DeLaRosa said there have been four abdominal aortic ruptures in the Bannock County area in the last year.

“This is a silent killer,” he said.

He recommends people with a family history of aortic aneurysms get an ultrasound screening.

DeLaRosa said the Heart and Vascular Center performs more endovascular procedures than any other place in Idaho.

Before coming to Pocatello, DeLaRosa had the common misconception that these types of procedures were the sole province of metropolitan medical centers.

“This is stuff reserved for New York, L.A. or Dallas,” he said.

Time and results have shown that Southeast Idaho can keep up with big city hospitals.

“People are coming from all over (for these procedures),” he said. “They can be done (here) and done fully and successfully.”