



Oregon's largest multi-specialty, physician-owned medical clinic.

Media contact:
Bela Friedman / 503-848-3640
Elizabeth Lindenmuth/503-963-2893

FOR IMMEDIATE RELEASE

The Oregon Clinic Offers Hybrid CABG to Reduce Hospitalization and Recovery Time for Cardiac Patients

-- Procedure combines minimally invasive cardiac bypass surgery with stenting; may be performed with or without robotics --

Portland, Ore., May 11, 2011 – Dr. Owen Miller, a 93-year old retired dermatologist loved playing golf and walking three to four miles each day. But after several episodes of disabling chest and esophageal pain and pressure, he worried that something might be very wrong. After failing a stress test, an angiogram confirmed that he had blockages in several coronary arteries.

Today, after a two-part surgery known as hybrid CABG (coronary artery bypass graft) and a four-day hospitalization, he is at home recovering much faster than expected. Doctors Charles Douville, thoracic and cardiovascular surgeon and Brad Evans, interventional cardiovascular specialist performed the hybrid CABG, which combines minimally invasive cardiac bypass surgery with stenting. Both physicians work with The Oregon Clinic, whose medical staff are also trained in using robotic techniques to perform hybrid CABG.

In the past, Dr. Miller would have had to undergo two separate surgeries and hospitalizations. Instead, thanks to new technology and the expertise of these surgeons at The Oregon Clinic, he underwent the less invasive hybrid CABG.

“I was surprised how good I felt after surgery,” said Dr. Miller. “I had no pain or discomfort. I feel great and am walking more every day.”

Because hybrid CABG uses minimally invasive cardiac surgery (MICS) techniques, it can lessen the complication rate and shorten recovery time as compared to traditional cardiac surgeries. It does not require surgical removal of a vein elsewhere in the body to form the graft and includes stenting of other vessels, a process commonly known as angioplasty. Bypass surgery and angioplasty are usually performed separately.

Dr. Charles Douville, thoracic & cardiovascular surgeon at The Oregon Clinic, performed the first part of the two-phase surgical procedure--the MICS bypass--in the operating room of Providence Portland Medical Center. After Dr. Miller was sedated, Dr. Douville made a four-inch incision under his patient’s nipple and inserted a small pain pump for additional pain relief. Dr. Douville also inserted rods under the ribs to stabilize the area. Using tiny precision instruments, he bypassed the blocked artery with the mammary artery.

This minimally invasive surgery is also known as a “beating-heart bypass” because, unlike traditional coronary artery bypass, it does not require cutting through the breastbone to gain access to the heart and then stopping the heart. Heart functions are better preserved if the heart is not stopped during an operation, making it easier for the heart to bounce back.

“Another benefit to the patient is that we didn’t have to remove a vessel in the leg because we were able to use the mammary artery, which is in the heart area,” said Dr. Douville. “There is less risk and faster recovery, two factors especially important to patients who are over 80-years old. We can get them up walking more quickly, which is a key to recovery.”

Dr. Brad Evans of the Cardiovascular Medicine division within The Oregon Clinic performed the second part of the procedure, which was completed in the Catheter Lab at Providence Portland Medical Center. This procedure uses imaging techniques to guide a balloon-tipped catheter to areas within a blood vessel that have narrowed due to blockages. The balloon is then inflated to open the vessel, deflated and removed. A small wire mesh tube called a stent is then placed in the area to help keep the vessel unblocked. The minimally invasive bypass and stenting, combined took a total of four hours, roughly the same length of time a more traditional bypass and angioplasty would take, but with just one hospitalization required.

“We’re excited because this type of teamwork often results in innovations that avoid some of the complications that come up with the elderly and the frail,” said Dr. Evans. “It also reduces costs.”

Alternatively, hybrid CABG can be performed with assistance from robotic arms using the da Vinci Surgical System.™ In September 2009, Andrew Tsen, MD, also of The Oregon Clinic, became the first cardiothoracic surgeon in the Portland area to perform this type of robotically-assisted surgery, which is offered at Legacy Good Samaritan Medical Center. Dr. Tsen, who is the director of Cardiothoracic Surgery for Legacy Health Portland, performs robotically-assisted hybrid CABG in the hybrid operating room. By combining operating room and catheterization capabilities in one surgical suite, both the cardiothoracic surgeon and the cardiologist can be in attendance at the same time; there is no need to transfer the patient from the operating room to the Catheter Lab.

Robot-assisted hybrid CABG uses a tiny incision in the chest through which robotic instruments are passed. The surgeon uses a special computer to control the robotic arms during the surgery. The robot enables a magnified, high-resolution, three-dimensional image on the computer screen and accurate, natural hand-eye coordination in using the robotic instruments.

“The result is great precision and accuracy along with less trauma, less pain and faster recovery for the patient,” said Dr. Tsen.

More research is needed on both types of hybrid surgeries to assess long-term outcomes and determine which patients are most appropriate for the procedure, but initial studies have demonstrated that hybrid CABG lowers the risk of neurologic injury (strokes), excessive bleeding and renal failure. Though hybrid CABG is still relatively uncommon (100-300 performed nationwide), Dr. Douville predicts it will catch on and become the standard as a lasting, safe and effective option for certain patients.

However, not all patients are good candidates for this procedure. The location of the diseased artery, the weight of the patient and other anatomical factors need to be considered before deciding whether a patient is suitable for hybrid CABG.

About The Oregon Clinic

The Oregon Clinic is the largest private specialty physician practice in Oregon, with more than 120 physicians practicing over 30 different medical and surgical specialties and sub-specialties. We use a team approach to address health conditions at more than 15 locations from Vancouver to Salem, and from Hood River to Astoria. Founded in Portland in 1994, our physicians and staff are committed to delivering the highest quality patient care, practicing evidence-based medicine, and providing leadership for the healthcare community. Visit www.orclinic.com or call (503) 935-8000 for more information.

###