BRIDGEPORT, CT, June 6, 2012—The first robotic coronary artery bypass graft (CABG) surgery in Fairfield County was performed on a Bridgeport woman on May 22 at St. Vincent’s Medical Center by cardiothoracic surgeon Albert DiMeo, MD. Dr. DiMeo performed a single vessel small thoracotomy on Gloria Leon, 43, using the Davinci Robot.

CABG is a surgical procedure in which one or more blocked coronary arteries are bypassed by creating a blood vessel graft to restore normal blood flow to the heart. Surgeons create the grafts from the patient’s own arteries and veins taken from the chest, leg or arm. The graft creates a new route for blood to flow to the heart.

The advantage of using the Davinci robot to perform surgery is that it can be performed minimally invasively without splitting the sternum or breast bone, as is necessary in standard CABG procedures. Also, Dr. DiMeo, the medical director of Minimally Invasive Cardiac Surgery at St. Vincent’s, had only to make three tiny incisions, two of which were less than one centimeter in size with the third being approximately five centimeters.

Additionally, with the traditional surgery, patients usually stay on the heart/lung machine throughout the procedure and for about six hours afterward. “We were able to take Gloria off the ventilator right on the table in the OR when surgery was complete,” Dr. DiMeo said. Whereas with standard CABG, patients do not begin to walk until at least a day, Gloria was walking a few hours after her surgery.

With the tiny incisions and no splitting of the sternum, there is no blood loss, less pain, less risk and recovery is much shorter. Gloria went home on May 24, two days post-surgery as compared to five days for standard CABG patients. According to Dr. DiMeo patients can return to work and normal activities within two weeks, a much shorter interval than for open chest procedures. With the robotic surgery, patients have no lifting restrictions and can drive much sooner than with standard CABG.

Cardiologists will usually refer a patient for a CABG if angioplasty and stenting have been unsuccessful, resulting in a reocclusion or blocking of the artery. CABG has the advantage of using what is referred to as the internal mammary artery for creation of the bypass graft, which lasts longer than stenting.

But of course, this entails an open heart surgery for the patient with greater risks and longer recovery than angioplasty and stenting. With the advent of robotic CABG, surgeons can now offer patients the long-lasting benefit of traditional CABG, combined with an approach that doesn’t require a major operation and promises less pain and a shorter recovery.
After having her first stent put in while living in Florida back in 2009, Gloria experienced pressure and discomfort again in her chest. Now back in Bridgeport, the mother of three sons sought out cardiologist Jared Selter, MD, who inserted stents on two occasions and finally a balloon, all which relieved the problems temporarily but did not prove a permanent solution as the stents kept closing up. So Dr. Selter referred her to Dr. DiMeo for the CABG procedure.

One day after surgery, she has only minor discomfort and is looking forward to an enhanced result. “It all went beautifully,” she said.

Currently, the procedure is indicated only for those patients with one blocked artery. However, according to Dr. DiMeo, this will most likely be expanded in the future to include patients who have multiple blockages.

Dr. DiMeo believes the robotic CABG procedure holds great hope for patients with blocked arteries. “This latest advance allows more patients who need stenting to reap the benefits of open heart surgery without its inherent risks. It increases the reach of bypass surgery through a minimally invasive approach.”