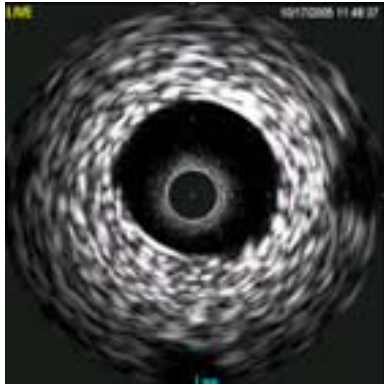




Intravascular Ultrasound (IVUS)



IVUS imaging provides extraordinarily precise information about the vessel, including vessel diameter, lesion length, anatomical landmarks, and plaque composition.

The Heart:

An Inside View with Intravascular Ultrasound

Despite medication for her coronary artery disease, Pearl Ivory recently began feeling a lot of chest pain. She went to see Dr. Syed Mahmood, an interventional cardiologist at DMC Sinai-Grace Hospital. Together, they decided to use a remarkable new procedure that would provide an amazing look at Pearl's affected artery.

The minimally-invasive surgery began with a small incision in the groin to insert a wire for an angiogram to locate and observe the artery problem.

During the procedure, Dr. Mahmood could easily see the problem. While performing the procedure, he reported "We see a moderate lesion based on this angiogram. But she has symptoms, so now I want to look at it from the inside and see if there's a correlation between its severity and her symptoms. And if it is, then she needs more than medications."

Fortunately for Pearl, DMC Sinai-Grace is the only facility in the state of Michigan to have this advanced type of intravascular ultrasound, or IVUS, machine. Dr. Mahmood threaded the equipment through the same incision in the groin, and was able to view detailed, full-color images from inside the walls of the artery.

After placing the equipment, he was able to take ultrasonic images from inside the blood vessel, and make some very precise measurements. What was supposed to be a very large vessel for Pearl was much smaller than normal, indicating a significant blockage.

With accurate dimensions of the blockage, Dr. Mahmood could proceed immediately toward the treatment Pearl needed to open the artery. Dr. Mahmood used a tiny balloon-like tool to open the artery and insert a stent to keep it open.

Afterward, Dr. Mahmood said, "The artery is opened, and she's going to do well. She's going to be on medication, which is going to help along with the stent."

He continued "We got a very definite picture of this artery from the inside, with good accurate measurements, good resolution of the images because of the new intravascular ultrasound technology. And in the same setting, once I found the blockage, I was able to open it up for her." Without this amazing new technology, Pearl would have been at significant risk for a heart attack. Her quality of life will also be much improved.

As for Pearl, she's looking forward to more good years enjoying her grandchildren and her life.

Visit DMC.org to learn more about intravascular ultrasound imaging technology, or to make an appointment with Dr. Mahmood and his team at DMC Sinai-Grace. The DMC: a better way to get better.