FACTS ABOUT STENTS

What is a stent?
A stent is a wire mesh tube that is used to help hold open an artery. It is usually used in combination with angioplasty (using a balloon to open a clogged artery).

Stents are used to hold open diseased coronary arteries (the arteries that supply blood to the heart), as well as diseased arteries of the peripheral vascular system (the arteries that supply blood to the rest of the body such as to the legs or kidneys).

Stents remain in arteries permanently. The tissue lining the arteries actually grows over the metal mesh to cover the inner lumen of the stent.

There are a variety of stents currently available. Some are compressed onto the outside of an angioplasty balloon catheter, and delivered by inflating the balloon in the desired location. Some are "self-expanding" spring-loaded devices, which expand automatically upon deployment.

Dr. Stratienko trained with the inventor of the stent in San Diego in 1990. He performed the first coronary stent in Chattanooga in 1993.

When are stents used?
Stent procedures have become very common. Stents are sometimes used as an alternative to coronary artery bypass surgery. In carefully selected patients, the use of stents can dramatically reduce restenosis following balloon angioplasty or other catheter-based procedures. Stents are also used frequently to hold open arteries that have been damaged, torn, or dissected by balloon angioplasty or other catheter-based procedures.

Stents allow angioplasty to be done in patients with severe and long-segment obstruction of coronary arteries. As soon as the initial part of the block is widened, a stent is placed, which holds it open allowing further opening to proceed. Stents have also allowed angioplasty to be performed in patients with blocks of multiple vessels, and in multiple blocks in a single artery.
What are the risks associated with a stent procedure?
Risks include the standard risks of an interventional, catheter-based procedure, which should be specifically discussed with your doctor.

Lesions treated with stents can "restenose" (re-narrowing within months after the procedure) similar to restenosis associated with angioplasty. The standard method of treating restenosis within the stent is to perform balloon angioplasty, sometimes with a second stent often with drug elution.

Drug Eluting Stents (DES)
Some stents have a very thin polymer coating which is impregnated with drugs that inhibit growth of tissue and therefore reduce the risk of restenosis to less than 5%. There may be a slightly higher risk of blood clotting with DES compared to bare metal stents (BMS) and therefore longer periods of treatment with blood clot inhibiting drugs are required with DES compared to BMS.

Follow-up Instructions
After your stent procedure, Dr. Stratienko will recommend blood thinning medications following your stent procedure. Agents such as Plavix® or Ticlid are usually given for some period post procedure along with aspirin. Aspirin is then continued indefinitely. MRI tests should not be done for at least eight weeks without your doctor's approval. Metal detectors do not present a problem. Stents appear to be safe in the long-term. There are no long-term complications associated with a permanent stent.