



Cardiology & Cardiac Surgery

HEART CATHETERIZATION TAKES A DIFFERENT ROUTE

When Rodney Gunsaulley underwent his first cardiac catheterization in 2005, interventional cardiologist and Director of the Cath Lab Charanjit Khurana, MD, FACC, FSCAL took the traditional approach and threaded the catheter through the femoral artery in his groin. “I was sore afterwards and there was swelling,” recalls the Arlington resident. “Plus, I had to stay overnight in the Hospital.”

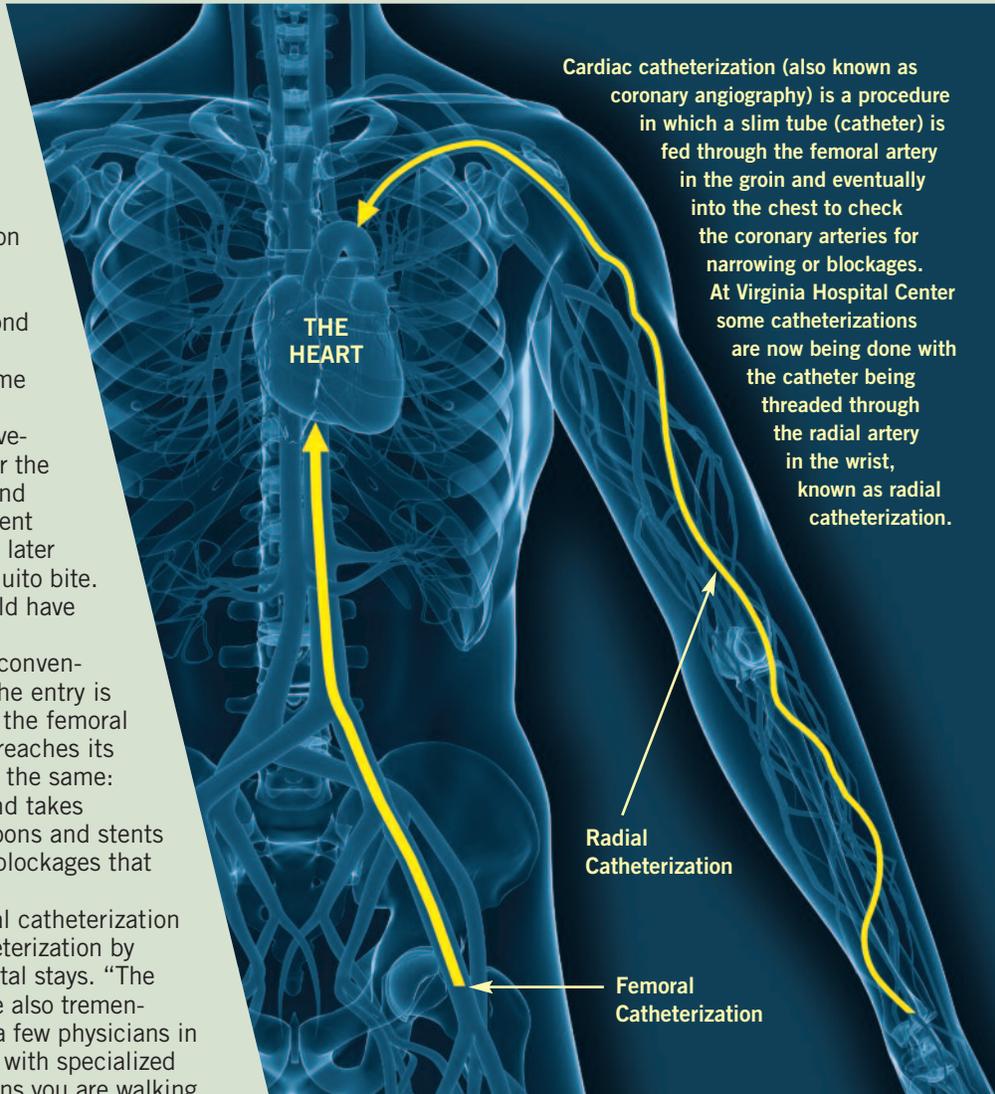
When Gunsaulley returned for a second catheterization in 2009, however, Dr. Khurana took a different route—this time feeding the catheter through the radial artery in his wrist. “It was a vast improvement,” says the patient, now 59. “After the catheter was removed, I wore a wristband which created a pressure effect to prevent bleeding. By the time I was discharged later that day, the wound looked like a mosquito bite. If I’d had a choice the first time, I would have chosen radial hands down.”

Radial catheterization differs from conventional cardiac catheterization in that the entry is through the wrist, rather than through the femoral artery in the groin. Once the catheter reaches its destination, however, the procedure is the same: the physician injects a contrast dye and takes pictures inside the arterial walls. Balloons and stents are then used to clear and repair any blockages that are found.

Some studies have found that radial catheterization reduces the risk of bleeding from catheterization by 73 percent and results in shorter hospital stays. “The benefits in terms of patient comfort are also tremendous,” notes Dr. Khurana, one of only a few physicians in the greater Washington, DC metro area with specialized training in this new procedure. “It means you are walking out of the lab and sitting on a chair in the lounge, versus lying in bed for four hours or more afterwards with some kind of compression or closure device. Most patients go home the same day.”

Donna Triplett, 62, had three previous femoral catheterizations, each requiring an overnight stay, before a fourth procedure was performed through her wrist. “I remember the earlier times being very uncomfortable afterwards,” says the Alexandria resident. “I had to lie still on my back for four hours, which made eating difficult. And because I’m diabetic, they had to flush my kidneys of the intravenous dye, but I couldn’t get up to go to the bathroom.”

“By comparison, the radial procedure allowed me to have lunch afterwards. I could sit up, watch TV, and walk to the



Cardiac catheterization (also known as coronary angiography) is a procedure in which a slim tube (catheter) is fed through the femoral artery in the groin and eventually into the chest to check the coronary arteries for narrowing or blockages. At Virginia Hospital Center some catheterizations are now being done with the catheter being threaded through the radial artery in the wrist, known as radial catheterization.

bathroom. I left the Hospital at 7:00 pm that evening with a bandage on my wrist, and took it off the next day.”

Because the path from wrist to coronary arteries is more circuitous than the straight shot from the femoral artery, radial catheterization is a complex procedure that requires special training and experience. Dr. Khurana does about 80 percent of his catheterization cases through the radial artery. However, radial catheterization is not appropriate for all patients, including those with heart valve problems, renal failure, inadequate blood supply to the wrist, or fragile circulation due to advanced age. Virginia Hospital Center is one of the few hospitals in the greater Washington, DC metro area where radial catheterization is now being offered. ■

