

NEWS FROM FORT SANDERS REGIONAL MEDICAL CENTER

# Man's heart cath placed thru wrist

Battling heart disease and diabetes for years, Johnny Braden of Caryville, 67, had angioplasty in 1990 and a number of cardiac stents installed after that, the most recent in August at Fort Sanders Regional Medical Center.

A cardiac stent is a tiny metal mesh cylinder that props open a blood vessel in the heart muscle to open up a blockage.

Braden is grateful for the improvements in stent technology available at Fort Sanders. His latest stent in August was inserted through an artery in his wrist instead of his groin. That meant less bleeding and a more comfortable, quicker recovery time.

"This time it was a lot more comfortable," says Braden.

A stent is inserted into the heart arteries through a tiny flexible tube called a catheter, threaded over a wire that is directed down the heart arteries. Typically the large femoral artery is accessed, through the groin. This is called transfemoral PCI (percutaneous coronary intervention).

But Dr. Brian Adams, an interventional cardiologist with Fort Sanders Regional, is one of a few physicians in the Knoxville area trained to insert stents through the smaller radial artery in the wrist instead, a procedure called transradial PCI.

If a stent is inserted through the groin, the patient must lie flat for several hours to



Johnny Braden, pictured four-wheeling with granddaughter Sabrina Owens, recently had a heart catheter placed through his wrist at Fort Sanders Regional.

avoid bleeding after the procedure. It can be uncomfortable for some patients to lay flat, particularly those with back problems. Patients who develop bleeding from the groin require additional pressure to the artery, either manually or with a 5 pound weight sandbag.

"It's like you're wearing a truck," jokes

Braden. "When they do it through the wrist, you don't have that."

Because the wrist artery is so much smaller, it bleeds less. After the procedure, the patient wears a wristband with a balloon in it. This inflates to put pressure on the incision site. Every half hour, nurses let the air out slowly to release the pressure as the

wound heals. During that time, the patient can sit up or even walk around the room.

"Believe me, it's a lot more comfortable," says Braden.

In studies, transradial stenting has been shown to reduce bleeding at the site of the catheter, reducing healing time and complications.

As with traditional transfemoral PCI stent procedures, patients usually go home the next day. Stenting procedures are considered noninvasive because there is very little cutting involved, just enough for the catheter to be inserted.

Braden recommends Fort Sanders and Dr. Adams to others who need heart care. Just weeks after his procedure, he is back at home with his wife, Ann, doing yard work, spending time with their grandchildren, fishing and riding his ATV.

"I've put about 15,000 to 20,000 miles on it in the mountains. When I go, I go for the day. I'm back exactly as I was before," he smiles. "The care at Fort Sanders, that was No. 1 in my opinion," Braden adds. "Everybody treats you like family instead of like a stranger. All the nurses, they were fantastic; they treated me with great respect."

For more information about procedures offered at the Heart Center at Fort Sanders Regional, call 865-673-FORT (3678) or go to [fsregional.com](http://fsregional.com).

## New technique opens blocked heart vessels via wrist

Heart catheterization procedures can save lives. Commonly called "balloon" angioplasty and stenting, these minimally invasive procedures use tiny, balloon-like catheters inserted through a patient's artery to reach the heart, where they facilitate a number of procedures to treat heart artery blockages.

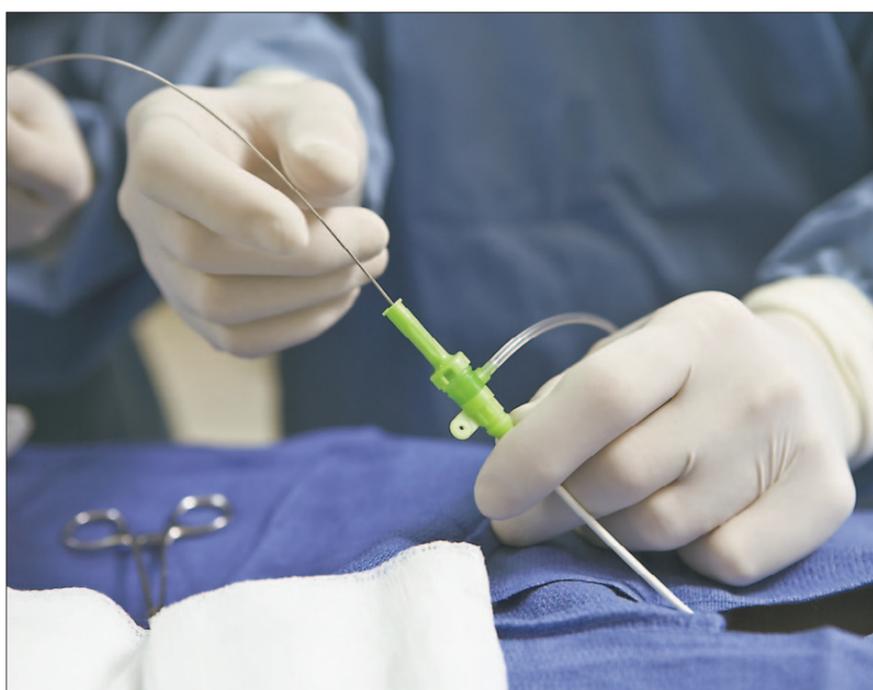
Currently, the majority of those catheters are inserted through the femoral artery, which is in the groin. But at Fort Sanders Regional Medical Center, a number of heart catheterization procedures are being performed through an artery in the wrist, a process called transradial cardiac catheterization.

This new technique can benefit patients with special health concerns. "It can be more comfortable for people who are morbidly obese, those with chronic back pain or patients who are on blood thinners and have a higher risk of bleeding," explains Dr. Joshua Todd, an interventional cardiologist with Knoxville Heart Group at Fort Sanders Regional. "With the wrist procedure, patients are sitting up immediately afterward with only a small wrist bandage in place."

While only 5 percent of cardiologists in the United States do transradial catheterization versus the traditional femoral approach, the use of this technique is growing and evolving. "European countries perform 50 to 90 percent of their catheterizations through the wrist," says Dr. Todd. "I think it will become more popular here and possibly become a standard of care in the U.S. Transradial access has also been shown to



Dr. Joshua Todd, Interventional Cardiologist



reduce hospital length of stay and lower health care costs."

One drawback to the transradial access is that in some patients (around 10-15 percent) the procedure may take a little longer than transfemoral access. Also, a quick, noninvasive bedside test must be done first on the wrist to make sure the artery has a dual blood supply in order to safely perform the procedure. Physicians say this technique is not suited



Dr. Brian Adams, Interventional Cardiologist

for every type of patient. "Transradial is not for everyone," explains Fort Sanders interventional cardiologist Dr. Brian Adams. "We still do emergency heart attack patients and patients who have bypass grafts via the femoral approach."

But, Dr. Adams and Dr. Todd say that with less bleeding, more patient comfort and comparable patient outcomes for both methods, using the wrist does give physicians another good option for catheter insertion.

For more information about the cardiac catheterization procedures available at Fort Sanders Regional, call 865-673-FORT (3678).



### FSRMC Receives Platinum Cardiac Award

Fort Sanders Regional's Cardiology Department is the recipient of the 2012 American College of Cardiology Foundation's NCDR ACTION Registry - 2012 GWTG Platinum Performance Achievement Award. FSRMC is one of just 164 hospitals nationwide to receive this designation. The award recognizes the hospital's commitment and success in implementing a higher standard of care for heart attack patients

*Benefits of*

## Transradial Cardiac Catheterization

- Less bleeding
- Less pain
- Quicker recovery
- Earlier return to work
- Low complication rate
- Lower cost
- Improved quality of life





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