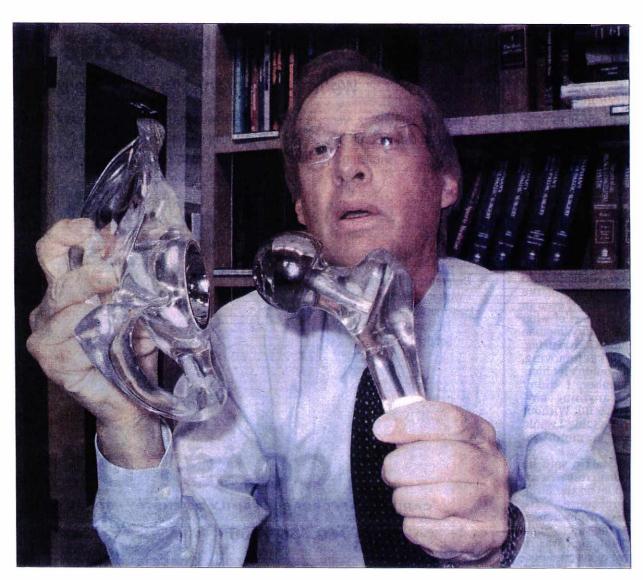
## NORTH COUNTY TIMES

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## Joint effort

Story & photo by BRADLEY J. FIKES

STAFF WRITER

## Newly approved hip operation restores vital mobility

After 40 years of "working hard, playing hard, and having a lot of fun," James Martin, 63, wasn't ready to quit, but his increasingly painful hips were. The former lineman for San Diego Gas & Electric Co. couldn't climb up power poles. He could barely walk.

Mary Jane Palmquist, 59, loved to teach dance as a middle school instructor. But she had to drop it when her

hips gave out.

Martin and Palmquist are looking forward to eventually resuming their activities without restrictions after undergoing a newly approved operation

on hip joint replacement.

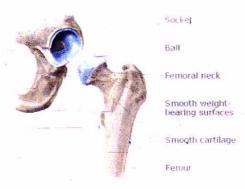
Called the Birmingham Hip Resurfacing System, it is a less drastic form of hip replacement that leaves more of a patient's bone intact. And if the resurfaced hip ever needs to be replaced, a conventional hip replacement is much

easier to perform.

They'll both need another operation on their left hips, which were also afflicted, but less painful. Already, though, they say the worst of their disability has been corrected.

"The pain that's in your hip is excruciating. Anyone who hasn't had it can't understand it," Martin said. "It goes through your groin and radiates into your knee like a hot knife. That pain is all gone."

Patients can resume doing whatever activity they normally could do, six months after the surgery, said Dr. James Helgager, an orthopedic surgeon who performed the Birmingham hip



COURTESY OF BIRMINGHAM HIP RESURFACING

resurfacing operation on Martin and Palmquist at Tri-City Medical Center in Oceanside.

Helgager went to England last year to learn about the operation, which was invented there. The operation was approved in the United States by the U.S. Food and Drug Administration in 2006.

Helgager said the Birmingham operation is suited best for people who have been physically active and expect to remain so, especially those in middle age. The patients' hip bone and femur must be sound; the operation can't be performed on someone with a condition such as osteoporosis that weakens the bones. **Above,** Dr. James Helgager, an orthopedic surgeon, holds models of the hip and thigh bone repaired with the Birmingham resurfacing system. **Left,** The normal hip joint, showing how the joint surfaces are coated with a smooth, slippery cartilage (white) that allows the bones to rotate freely and painlessly.

Long time coming

The Birmingham operation is most notable because it preserves the ball of the femur—the thigh bone. This ball, which connects to the rest of the femur by a narrow neck, is removed in conventional hip joint replacement. A highly polished metal alloy ball with a protruding spike is hammered into place. This glides along a replacement socket inserted into the hip bone.

In the Birmingham, the femur ball remains.

"You're just capping the upper end of the femur," Helgager said. "And at the same time you're resurfacing the cup of the hip joint."

In the Birmingham, the femur ball and the hip bone socket are covered with highcarbide cobalt chrome. These implants are made by one company, Smith & Nephew, although other medical device companies are expected to introduce their own products.

Metal is stronger than bone. However, bone regenerates, and metal does not. If the bone marrow in the center of the femur ball is healthy, this living part of the bone will keep the femur ball strong. This principle has been extensively tested and verified, first in animal studies, and now in a decade of use in humans.

"It's been done in Europe, the U.K. and Australia since 1997," Helgager said. "The FDA looked at the cases that had been done elsewhere, and after they had evaluated the outcomes, they felt it was a

good operation.'

The administration's caution (or slowness) in approving the Birmingham resurfacing procedure was because conventional hip replacements already do a pretty good job, Helgager said. The agency would have acted faster had no effective treatment been available. So it wanted to see years of followup studies in case some unexpected problem arose.

More information about the procedure can be found on the Web at http://www.birminghamhipresurfacing.com.

Spreading the news

Public knowledge of the procedure may soon increase. Stryker, a big American-maker of artificial joints, is expected to begin marketing a similar British-designed device by early fall. Another device-maker. Wright Medical, is close on its heels.

Other orthopedics companies like Zimmer Holdings, Biomet and the DePuy Orthopaedics division of Johnson & Johnson that are selling resurfacing systems overseas are further from getting approval in this country.

Competition could eventually bring down prices. Smith & Nephew has a list price of \$12,500 for the Birmingham system, and the complete procedure often costs more than \$25,000, which is comparable to a total hip replacement.

At least for the shorter term, though, competition is constrained by the limited number of doctors who can offer resurfacing and the even smaller pool of practitioners.

Many patients, as a result, are continuing to go outside the country. Some fly to India, where the procedure is available for \$8,000. Others pay \$15,000 or so in countries such as Belgium or Britain, which have surgeons who have done hundreds or even thousands of resurfacings. But insurers rarely cover such "medical tourism," as it is known.

## For the active set

Hip joint replacements are performed mostly in elderly patients, Helgager said. These people are generally not physically active, and so aren't worried about the constraints of their replacement hip. Vigorous physical activity is forbidden. And the replacements do wear out, in about 15 to 20 years.

For people in their 70s or older, these issues aren't much of a factor, Helgager said. But for those younger or middle age, such as Martin or Palmquist who are used to physical labor, it's a signifi-

cant constraint.

Martin said he still gets a jolt of excitement when the power goes off. Normally, he'd be racing to the site of the outage to help fix it, even in the night. That's part of what made being an utility lineman appeal to him. After retiring, he wanted to keep moving, but the pain wouldn't let him.

"By December, I didn't want to do anything anymore," Martin said. Without an operation, he said, "I would have bought a motorized wheelchair."

However, Martin said he had already done research online and read up on the Birmingham procedure. He checked a list of physicians trained to do the surgery, and found that Helgager was in his HMO's list of covered doctors.

At 63, Martin was on the older edge of those suitable for the Birmingham. But his generally good physical condition tipped the balance in his favor.

Since he had a few months to prepare for the operation, Martin said he stepped up his exercise regimen to be in as good shape as possible.

He began the operation at Tri-City Medical Center at 8 a.m. March 29, a Thursday.

"I was out by noon, in my room at 2, and at 4 a physical therapist got me out of bed," Martin said. He walked around slowly on crutches. He was discharged the following Saturday.

Martin still feels discomfort where his muscles were cut, which he dismisses as

"soft tissue pain."

Palmquist said her hip pain built up over five years, progressively limiting her movement. She learned of the Birmingham operation from a school principal, and did more research. She liked what she read.

Palmquist had her operation, also at Tri-City, on Feb. 2.

"From what I've read, eventually I should have full range of movement," Palmquist said. "You save so much of your own bone so that if in 15 to 20 years I do have to have this replaced, it should be easier."

She also experienced the customary pain and soreness, which got easier as time went on. And as the pain went away, her mobility increased.

"I went from a walker to two crutches, then I cut back to one crutch, then to a cane, and now I'm off the cane," Palmouist said.

As she continues to recover, Palmquist looks forward to

increased activity.

"Now I can get back to all the things I love to do, riding, biking and jogging. I'm going to go skiing again and dance again."

Material from wire services was used in this story. Contact staff writer Bradley J. Fikes at (760) 739-6641 or bfikes@nctimes.com. Comment at nctimes.com.