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Health & Fitness

KNEE REPLACEMENT SURGERY

Let's recap: Results of knee replacement surgery are often even better than the original joint

Story By Britt Fairchild / Features Writer

Martha van Gessel used to dread mornings. She had suffered from osteoarthritis for seven years, and her knees had become so worn that even stepping out of bed caused her "bone-grinding" pain.

"Every step was agony," remembered the 73-year-old San Luis Obispo resident. "I couldn't garden, I couldn't shop. I love to swim, but I couldn't (make it from the parking lot to the door of the pool)."

Thanks to a local orthopedic surgeon, Dr. Thomas Ferro, those days are gone.

Using the latest technology in joint replacement surgery—a computer-assisted navigation system—Ferro recently replaced both of van Gessel's knees: the left knee on Dec. 1 and the right knee just two months later on Feb. 1.

Despite some slight swelling in her right knee, discomfort at night while trying to find a comfortable position in bed, and a tendency to tire easily, van Gessel feels like a new woman—a woman who can walk again.

"I'm feeling wonderful," said van Gessel, noting she's now able to take her dog Lucky on short daily strolls. "I have a new lease on life." And her legs are no longer bowed from weak knees.

She's also not shy about showing off what she calls her "battle scars," the 6-inch incisions on each of her knees.

Van Gessel is just one of a number of Ferro's patients to have had knee replacement surgeries performed with the PiGalileo Computer-Assisted Orthopedic Surgery System from PLUS Orthopedics since Ferro began using it in August 2004.



Dr. Thomas Ferro adjusts a replacement in a patient's knee during a knee replacement surgery Feb. 18 at Arroyo Grande Hospital. The blood flow is stopped further up the leg to make the entire surgery blood-free. The yellow fabric around the incision is an Ioban antibacterial drape, which surrounds the total knee area and provides a sterile drape all the way to the edge of the wound. // Aaron Lambert/Staff



Dr. Thomas Ferro is the only orthopedic surgeon in California using the PiGalileo system to perform total knee replacement surgeries.

What makes this technology so valuable to Ferro is that it calculates exactly where he should make the incisions in the knee, and where to place a patient's implant.

Computer-assisted orthopedic surgery with the PiGalileo system aims to position the knee implants optimally for the patient, thereby reducing the potential for misalignment and providing more consistent surgical precision.

That means a better fit and longer use for the patient, Ferro said, adding that knee implants, for example, that are installed too loosely could wear out more quickly.

"It tells me all the information I used to do by hand," he said of the system, noting the technique has allowed him more consistent results in his procedures. "You don't open the center of the bone at all."

Ferro is currently the only orthopedic surgeon in California using the PiGalileo system to perform his total knee replacement surgeries at Arroyo Grande Community Hospital.

Only two other hospitals in the country—Mercy Medical Center on Long Island, N.Y., and Mercy Medical Center in Nampa, Idaho—have this type of technology available. However, there are more than 70 PiGalileo systems in use around the world.

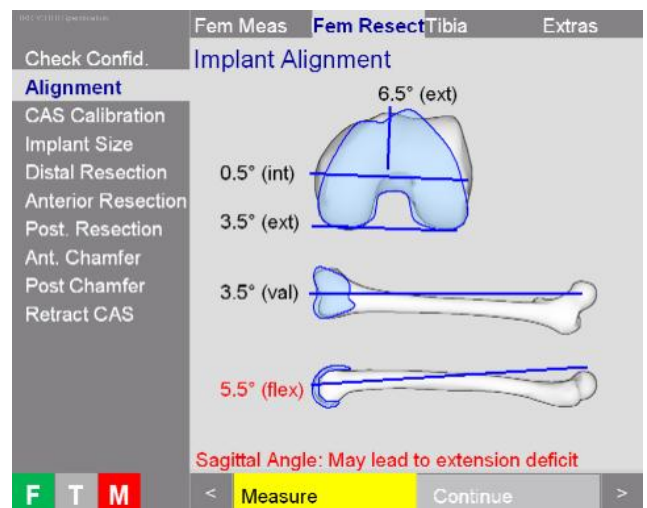
That places the Central Coast in a unique position, Ferro said, not only because local patients do not have to leave the area to receive cutting-edge orthopedic care, but people from other areas can come here to access the technology as well.

So far, people have come from Santa Barbara, northern San Luis Obispo County, Bakersfield and Fresno to be able to access this technology.

Van Gessel learned about the PiGalileo system when she had her second knee surgery.

Trained years earlier in the Netherlands—her homeland—as a physician assistant who had worked for one of the first orthopedic surgeons there, van Gessel said hearing about the new technology was "right up her alley."

She seemed pleased that such cutting-edge technology was used during her surgeries, and that Ferro performed them.



The screen of the computer navigation system displays the angles of the knee and leg so Ferro can view it at any time throughout the surgery.

"I heard he was an excellent knee doctor," she said, noting that recommendations from various others, including another doctor in Arroyo Grande, led her to Ferro.

Having suffered with the pain for about seven years, van Gessel, who knew she would eventually have to have her knees replaced, was initially in no hurry to have surgery.

"I had all these negative thoughts about surgery," she said.

A trip to Europe with her children in July changed her mind. Because of all the walking involved, she decided to use a wheelchair.

Her son, who did most of the pushing, told her that the next time they went on vacation, she'd better have had knee surgery or get an electric wheelchair.

That started her thinking—either have surgery or be in a wheelchair for the rest of her life.

"My children have been after me for years," she said.



Ferro's name also kept coming up among customers Ben Iverson, 54, talked to at Albertson's grocery store in Arroyo Grande where he works.

Iverson's knee problems started when he injured himself on the job in the early 1980's, which caused some of the cartilage in his knee to tear. That has not only caused Iverson, who lives in Nipomo, pain, but has also impeded his walking.

Several years ago, had surgery, but at that time the procedure only involved removing the cartilage. Over the next 20 years, the problem worsened. The knee started hurting more and Iverson began limping.

In 1999, surgeons told Iverson that his knee had worn down so much, it was bone on bone. But at that time, replacement knees were made out of ceramic, which lasts only 10 to 15 years, meaning Iverson would have to have another knee replacement later.

So he waited to have surgery.

"I hung on as long as I could," Iverson said.

Iverson had a total knee replacement on his left knee on Oct. 27. He was 53 at the time. Like van Gessel's, Iverson's knee is still healing.

He said the knee is still fairly swollen and the knee cap is sensitive. There is also numbness on the left side of the joint. But although it becomes stiff easily, it doesn't hurt. He said he also doesn't have full extension of the knee yet, but he's close.

After getting used to limping, Iverson said he's had to relearn how to walk. "I concentrate on not limping," he said.

He's now able to walk up and down stairs—without having to use a handrail.

After the surgery, patients do remain in the hospital for a few days. After they are released, they undergo several weeks of physical therapy. Typically, they can return to some activity after six weeks, and full activity after 12 weeks, Ferro said.

Iverson and van Gessel both had a physical therapist come to their homes for two to three weeks.

Iverson also went to physical therapy three times a week for three months.

For the first surgery, Gessel was in the hospital for three days, followed by six days in a transitional care center, because she lived alone and therefore had no one there to care for her.

With the second surgery, she was in the hospital from Monday to Saturday. Her daughter from Virginia came to stay with her and help her for two weeks. A physical therapist came to her home for about two weeks after the surgery, and she went to physical therapy for three weeks at French Hospital.

The day after the surgery, she was up, taking a few steps, which she described as painful. The next day she was up again, and this time it hurt a little less—plus it was a different pain from what she was used to feeling.

"It was a healing pain," she said. "I knew it was a healthy pain."

Although van Gessel recovered well, one thing she's looking forward to is walking on

the beach.

Ferro has been selected by one of the leading medical instrument companies that developed the product to be one of its primary educators who will train fellow surgeons from around the United States.

He has also traveled to Vienna to work with the company on new software for the machine, which will help make it even easier to use.

"I want to be the Henry Ford of knee replacements," he said.

Ferro also performs total hip replacement surgeries. He has offices in Santa Maria, Arroyo Grande and Morro Bay. For more information, visit bonejointcenter.com or phone the Santa maria office at 346-2646, or the Arroyo Grande office at 481-3685.