

PERSONAL HEALTH

3 Years Later, Knees Made for Dancing

By JANE E. BRODY

The question most often asked by longtime readers and acquaintances I haven't seen for a while is, "How are your knees?"

They recall the columns I wrote in February 2005, three months after having both knees replaced, in which I described the unexpected, prolonged and poorly treated postoperative pain and the surprising length of time before I could resume normal activities.

Some readers may also recall the "one-year later" column relating my return to long walks and ice skating, and the ability to stand for hours without pain. I'm happy to report further improvements.

I'm dancing again, and in March 2007, I hiked in Tasmania and walked all over Sydney, up and down hundreds of steps, for many hours each day with no knee or leg pain. This past March, I toured Vietnam by bicycle, riding as much as 35 miles a day over hot, dusty roads without pain.

But the truth is that artificial knees, while certainly an improvement over severely arthritic ones like mine, are not like normal, healthy knees. There are limitations inherent in the devices and surgical techniques that most surgeons use. Although a vast majority of patients ultimately fare really well, in some cases the device fails or there are lasting injuries to internal tissues.

Studies of many hundreds of patients with total knee replacements show potential problems surgeons may fail to mention in advance. "What we as health professionals tell patients preoperatively isn't always what they need to know," Ann F. Jacobson of the Kent State University College of Nursing said in an interview.



ANDY MARTIN

Managing Expectations

Dr. Jacobson and her colleagues studied the preoperative and short-term postoperative experiences of 27 patients undergoing total knee replacements. Writing in the May issue of *The American Journal of Nursing*, they concluded, "Patients need to be better educated and supported before and after total knee replacement surgery."

The researchers found that many people delayed the surgery for months, even years, "despite increasing pain and limitation" and difficulty maintaining their independence. Postoperatively, the main issues for patients were pain, difficulty with the activities of daily living, and the time it took to recover their independence.

"Patients really struggled with having to be a bother to others," Dr. Jacobson

said. "They need help beforehand in learning to let go temporarily of their independence and accept the fact that they'll need help after the surgery."

Perhaps the study's most important finding is that patients are often told that they will be at a certain level of recovery in a certain length of time, which often leads to unrealistic expectations, Dr. Jacobson said, adding, "Everyone heals differently, and there's no one prediction that can apply to all patients."

For example, I had been told that I would be driving in four weeks when I still wasn't ready to drive in eight. And I needed potent pain medication for four months to fulfill the demands of my professional and personal life.

What about the long-term results, years after the surgery? These are some facts that patients might like to know:

☞Kneeling is problematic. It can hurt to put weight on metal knees, even on a cushion, making activities like gardening a challenge.

☞Falling on an artificial knee, even banging it on furniture or a briefcase, can hurt a lot more and longer than you might expect.

☞Going down steep steps can be difficult and may require a sideways, one-foot approach. A normal knee bends at an angle of about 145 degrees, but replaced knees often achieve only 120 degrees, if that. Sitting on the floor cross-legged may be impossible.

☞Despite the passage of time and many months of physical therapy, there can be residual discomfort. I "feel" my knees on every rotation of the bike pedals, though the sensation is not what I would call pain and not enough to stop me from riding.

☞Most artificial knees are metal and set off the security alarm at airports, requir-

ing a personal scan with a wand. This may be moot when new body scanners are in all airports.

¶Some patients require a surgical revision within two years of a replacement because of technical problems like instability or poor alignment of the new joint.

As one surgeon reported in 2005, 52 percent of knee replacement patients experienced functional limits, versus 22 percent among other people their age. Those limits included problems in kneeling, squatting, moving laterally, turning and cutting, carrying loads, stretching, leg strengthening, sex, playing tennis, dancing and gardening.

In a British study of 4,677 total replacements 10 years after surgery, 80 percent of the replacements had met patients' expectations. Still, 30 percent of patients had a problem, 12 percent needed a revision within the decade, 22 percent had constant or regular pain, and 13 percent had severe pain.

In a study in the United States more than six months after surgery, just 35 percent of patients were able to do all

they wanted to and only 13 percent had no restrictions on activities. In another American study, a third of patients were dissatisfied with their operation 6 to 12 months later. As one surgeon, Dr. Pieter H.J. Bullens, put it, "It appears that surgeons are more satisfied than patients after total knee replacement."

New Designs

Some orthopedic surgeons are using new equipment and techniques that can improve the success of knee replacements and minimize the risk of complications.

One new design, the Triathlon knee, results in quicker recovery and return to function, according to surgeons who have used it.

Other surgeons use computers to help them properly place and align the artificial joint. Still others, like Dr. Peter M. Bonutti, who runs an orthopedic clinic in Effingham, Ill., and is an associate clinical professor at the University of Arkansas, have adopted a less invasive technique. It uses smaller surgical instruments and creates a smaller incision,

reduces trauma to soft tissues and avoids moving the patella, or kneecap, during the operation.

Among 24 patients who had both knees replaced using the new technique, Dr. Bonutti reported that there was an early advantage of less pain, much less need for narcotics and quicker return to function, even for patients who were seriously overweight or out of shape. One older man said he went dancing the day he was discharged from the hospital and has been dancing ever since.

In a follow-up study two or more years later of 166 patients ages 41 to 94, including 25 with double knee replacements, 97 percent were functionally excellent, Dr. Bonutti reported in 2005. Six knees needed minor manipulations under anesthesia, and five patients required reoperations, which he said occurred "early in our learning curve."

My own bottom line? My new knees are a significant improvement over what I had before. I'm not at all sorry I had the surgery, and I'm glad I did not wait until I could not walk unassisted.