



FOOD
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Tomorrow
in Part 2

This joint's gender-specific

BY ELLEN MITCHELL
SPECIAL TO NEWSDAY

Angela Vigliarolo awoke on May 18 to find she'd become a trailblazer, the initial New York State recipient of "the first knee replacement shaped to fit a woman's anatomy," according to its manufacturer. Within hours Ruth Abramczyk followed close on Vigliarolo's heels . . . or knees.

Until they emerged from anesthesia, neither woman was aware she was a pioneer. It was then they learned their surgeon had opted to use the new Gender Solutions High-Flex Knee.

But as Vigliarolo put it, "I think it's wonderful that they are designing something specifically for a woman. Our bodies are different, and if this will help us move after we're recovered, I say go for it."

Vigliarolo, 54, of Queens and Abramczyk, over 65, of Merrick both now have the female artificial knee developed by Zimmer Holdings Inc., a manufacturer of orthopedic surgical products. The Gender Solutions High-Flex Knee, according to Zimmer

chairman Ray Elliott, was designed and developed with the understanding that "women are clearly not little men."

Vigliarolo and Abramczyk both underwent total knee replacements at Franklin Hospital Medical Center in Valley Stream. Their doctor, Giles R. Scuderi, is an attending orthopedic surgeon at Franklin and at Lenox Hill Hospital in Manhattan. Scuderi practices in Manhattan at the Insall Scott Kelly Institute for Orthopaedics and Sports Medicine and has an office in Rockville Centre. He is an assistant clinical professor of orthopedics at Albert Einstein College of Medicine as well as a Zimmer consultant and member of the team that designed its female knee implant.

"Total knee replacement has been functioning very well for men and women over the last couple of decades," Scuderi said. "But we wanted to meet the unique features of a woman's knee because a woman's knee is a bit narrower. The standard implant is designed for the average size. When we did a total knee replacement we noticed there were compromises that we made. We always

Replacement knees for women only

thought there was room for improvement. We wanted to address women in a very specific and unique way."

According to the manufacturer, the gender-specific knee favors those anatomical distinctions primarily because of its shape. Zimmer claims its implant is narrower, thinner and has a more natural angle between the female pelvis and the knee.

There are already about 150 artificial knee designs manufactured by a variety of companies available on the worldwide market. They come in a vast array of sizes, but according to Scuderi those implants merely "increase the inventory of sizes, but not shapes."

Better device or marketing?

Is the new gender-specific knee really an improvement over the existing armamentarium of artificial knees? Or, as some are suggesting, is this more an attempt to ensure Zimmer's share of what is fast becoming a highly lucrative medical-products market aimed at the female consumer?

In fact, Zimmer Holdings is at work on developing a total hip replacement for women, and other female-specific artificial joints are expected to follow.

"We believe women are a significant key to the future of orthopaedics because they represent the majority of implant patients and because they are also typically the primary health-care decision makers in their households," Elliott said in Zimmer's latest financial report.

The potential market for a female knee is great. According to the National Center for Health Statistics, 400,000 total knee replacements are performed annually in the United States, almost two-thirds of them on women. Then, too, the population is aging, with women's life expectancy outdistancing that of men. With longer lives there will be a need for replacement prostheses, as both women and men

outlive the efficacy of their



NEWSDAY PHOTO / BRUCE GILBERT
Dr. Giles Scuderi, above, used the Gender Solutions High-Flex Knee, right, in surgery on Merrick resident Ruth Abramczyk, below.



NEWSDAY PHOTO / JULIA WEEKS

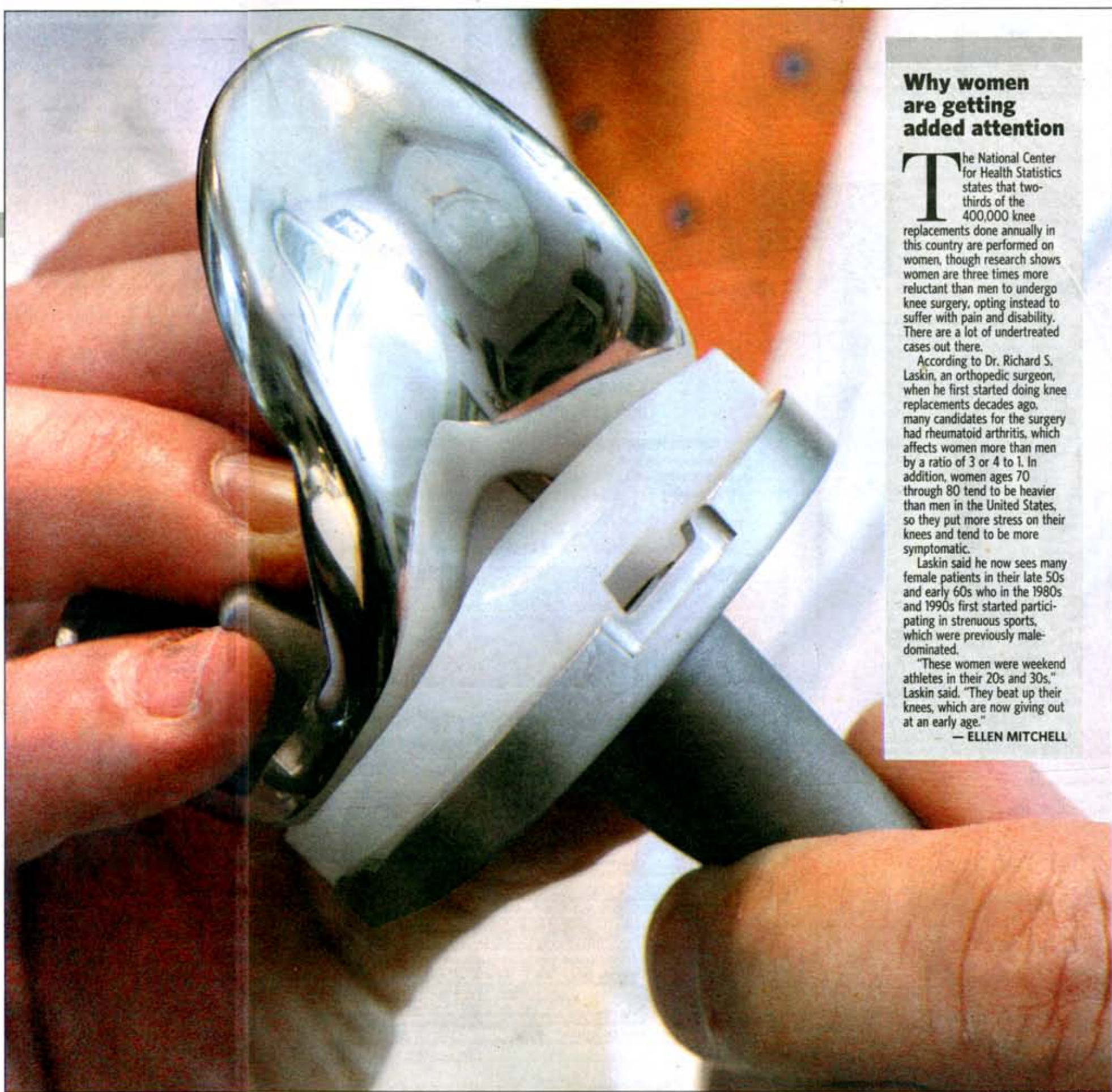
earlier artificial implants.

Dr. Richard S. Laskin is a professor of orthopedic surgery at the Hospital for Special Surgery in Manhattan and has a private practice in Manhattan. Laskin said the concept of smaller knee implants is not anything new. He said other companies have devised smaller knees after they studied the X-rays and MRIs of both men and women.

Stryker Corp., a Zimmer competitor, for instance, has its own Triathlon Knee, which it advertises as appropriate for men and women. But, according to Stryker, because it comes in several smaller sizes and has a slightly different shape it is particularly appropriate for women.

In response to Zimmer's claim that it is the shape of their gender-specific knee that makes it unique, Laskin said all the smaller implants are smaller proportionately from side to side and from front to back, and "that makes them a narrower shape as well."

Laskin has been involved in developing artificial knee



NEWSDAY PHOTO / BRUCE GILBERT

Why women are getting added attention

The National Center for Health Statistics states that two-thirds of the 400,000 knee replacements done annually in this country are performed on women, though research shows women are three times more reluctant than men to undergo knee surgery, opting instead to suffer with pain and disability. There are a lot of undertreated cases out there.

According to Dr. Richard S. Laskin, an orthopedic surgeon, when he first started doing knee replacements decades ago, many candidates for the surgery had rheumatoid arthritis, which affects women more than men by a ratio of 3 or 4 to 1. In addition, women ages 70 through 80 tend to be heavier than men in the United States, so they put more stress on their knees and tend to be more symptomatic.

Laskin said he now sees many female patients in their late 50s and early 60s who in the 1980s and 1990s first started participating in strenuous sports, which were previously male-dominated.

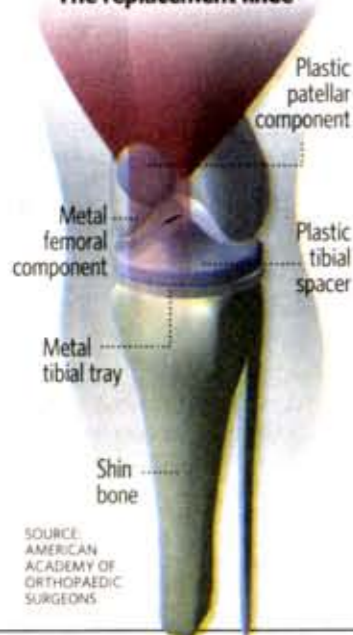
"These women were weekend athletes in their 20s and 30s," Laskin said. "They beat up their knees, which are now giving out at an early age."

— ELLEN MITCHELL

Replacing the knee

The knee is the largest joint in the body and needs nearly normal function to perform even routine tasks. About 400,000 people each year in the United States have total knee replacement surgery to repair damage from disease or injury that causes pain, weakness and reduced function of the knee.

The replacement knee



During the two-hour operation, damaged cartilage and bone are removed and replaced with metal and plastic parts. After surgery, patients can expect a hospital stay of several days and physical therapy.

Who may benefit

There are knee implants designed just for women. Some key features:

- NARROWER SHAPE** Fits a woman's anatomy and prevents the implant from damaging ligaments and tendons.
- THINNER SHAPE** The bone at the front of a woman's knee is less prominent than a man's.
- NATURAL MOVEMENT** Conforms to the way a woman moves, which is the result of a different body structure.

SOURCE: AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

AP / NEWSDAY

implants for Smith & Nephew, another manufacturer of orthopedic products. He said that 34 years ago when he started doing knee replacements, they came in only two sizes.

Sizes come very close

"We'd kid that they came in 'too large' and 'too small,'" he said. Today, however, Laskin explained, the difference between any two sizes is usually 3 or 4 millimeters, or about a sixth of an inch. "If a person's bone is in between two sizes, the worst off it's going to be is 2 millimeters from one size, or about a twelfth of an inch, which from a practical point of

view isn't much of anything." "Zimmer has taken a concept — which is real and true but that everyone else has realized for a long time — and they have commercialized it very well," Laskin said. "That's fine, and there's nothing wrong with that, but it's nothing new. It's to their credit."

Laskin, too, foresees gender-specific orthopedic products as a wave of the future.

"Everybody likes to feel something has been made custom for them," he said. "A woman would like a woman's shampoo; it's everything from shampoos to now total knees. Some of it is realistic, but a lot

of it is marketing."

According to Scuderi, Zimmer's gender-specific knee is expected to have a "survivorship" of 15 to 20 years, much like other total knee replacements. "It will perform as well, if not better, functionally, and we expect the same longevity," he said. That, coupled with the less invasive surgery now used, has been a boon to "helping patients get back to enjoying their lives a lot faster. It's a double benefit," Scuderi said.

Both Vigliarolo and Abramczyk are finding that to be true. Vigliarolo has lupus, and as a result of steroids she has taken for that condition, she

developed osteonecrosis of the knees. She has had three earlier knee replacements on her right leg, all with "standard" size replacements. This was the first procedure on her left leg and the first with the Gender Solutions High-Flex Knee.

Faster rehab

"I'm walking with a cane sooner than I did the last time," Vigliarolo said just three weeks after her surgery. "My physical therapist said I am very advanced as far as my rehabilitation goes. I do think my recovery is going quicker."

Asked about pain, Vigliarolo said, "It's a painful recovery —

I won't say it's a walk in the park — but each day things are a little better."

Abramczyk has osteoarthritis. A grandmother of six, she was accustomed to walking three miles a day in under an hour, but before her surgery a walk of only 10 or 15 minutes left her in such pain, she said, that she "couldn't take it anymore." Just three weeks after surgery to install the Gender Solutions High-Flex Knee, Abramczyk was back to walking 25 minutes a day without pain and only a very minimal surgical scar.

"My grandchildren think it's awesome," Abramczyk said.