Baby boomers will create a joint replacement boom

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Dr. Mark A. Hartzband, a prominent Bergen County orthopedic surgeon, is a baby boomer who has many members of his own generation as patients.

“My average age is somewhere between 56 and 58, whereas when I went into practice 26 years ago, my average age was 78,” says Hartzband, 57, who estimates that 50 to 60 percent of those on whom he does knee and hip replacements — his specialty — are boomers.

“I’m a very minimally invasive guy, and those are the people who are most attracted to minimally invasive surgeons, ’cause … they want to minimize how much time they’re out of work.”

According to the American Academy of Orthopaedic Surgeons, more than 700,000 primary total hip and knee replacements are performed in the United States each year, “and demand for the surgery is expected to double in the next 10 years.”

Boomlers, says Hartzband, “are the fastest-growing population for joint replacements.”

To be sure, many of us have aches and pains, and maybe snaps, crackles and pops, that we never used to. Perhaps we did too much running or disco dancing. Maybe we now do too much noshing and sitting.

As obesity has risen in this country, so have joint replacements, especially knees, says Hartzband, who took us through many factors contributing to the boomer boom one morning at his Hartzband Center for Hip & Knee Replacement in Paramus.

“Joint replacements have gotten vastly better in many ways over the last 30 years in that they last much longer [15 to 20 years], they tolerate much more activity and they’re much easier to do,” says Hartzband, who does procedures at Hackensack University Medical Center, where he’s director of the Joint Replacement Service, and at SurgiCare Surgical Associates of Carlstadt. “We routinely now do ambulatory joint replacements. They’re not for everybody, but every Monday I do four patients who go home from the surgi-center in the same day.”

Minimally invasive procedures — an important trend in hip and knee replacements — involve a small incision and less cutting and bleeding, Hartzband says.
They can result in fewer complications, as well as less post-operative pain and a faster return to activity, he says. Individual cases vary, but the expected recovery time is one to two weeks for a hip and one month for a knee. And for all these reasons, “the threshold for saying ‘Uncle!’ has gotten lower,” he says.

Surgical results have also vastly improved, Hartzband says. Back in the mid-1980s, for example, knee replacement surgery was considered a success if the patient wound up with 90 degrees of flexion, which is “nothing near normal,” he says. “Now, typically, patients have 130 degrees or more.”

Knee implants themselves have also greatly improved, he says. “There was a large generation of very successful knees, in terms of survivorship, that often [made] a clunk as a piece of tissue snapped over a rough edge in the implant,” says Hartzband, noting that patients could hear and feel the clunk. “Those kinds of problems have by and large been addressed.” About four years ago, Hartzband was one of the surgeons involved in designing a female knee. Women, who account for 60 percent of knee replacements, “traditionally have a lower satisfaction rate than men in knee replacements, because of the geometry of their bones,” he explains. “Their knees are taller and narrower than [those of] men. And traditionally, all knee replacements were designed for men, because the bones they used when they originally designed them just happened to all be male bones.”

The big question: At what point should someone in pain consider replacement? “When it’s interfering with your ability to do what you want to do,” Hartzband says. “The typical symptoms are pain, which can be in a million different variable places, swelling, deformity. People get progressively bowed or knock-kneed … because they’ve a worn-out joint.”

One of Hartzband’s boomer patients, 51-year-old Vincent Boniello, had two total hip replacements in early 2009 (the first on Jan. 5; the second, March 2) — after being in pain from osteoarthritis for five years. “It started with one hip, and then eventually I destroyed the other hip, I guess by compensating,” says Boniello, of Nutley. “It got to the point where the cartilage was completely gone between the joints. At the end of 2008, I finally just gave up.” Hartzband did both as same-day surgeries. “I went in 7 o’clock in the morning and was home at 7 o’clock in the evening on crutches,” says Boniello, who returned to work May 18 and says he’s 95 to 99 percent back to normal.

“I got my life back,” he says.
Another of Hartzband’s patients, 53-year-old Kathleen Fagan of Montclair, had her right hip done in July 2009, and in October had a left-knee revision (to fix another doctor’s knee replacement surgery). “Now I walk normal for the first time in eight years,” she says.

Because studies link the number of joints a surgeon does with his or her results — the more, the better — many doctors have specialized, says Hartzband. He and his partners, Drs. Harlan B. Levine and Gregg R. Klein, “just do joints” (five to 10 a day each, three days a week).

Says Hartzband: “Our whole goal now is to make it feel like you never had anything done, whereas it used to be to get you out of a wheelchair.”

Q&A

Is arthritis the reason why most people get knee and hip replacements?

Well, I mean, you could have sporting injuries, or a cartilage tear, which is usually from trauma. But as you get over 55 or so, most of these things, in the absence of an acute traumatic event, are based on arthritis …

Arthritis is a disease where you lose cartilage and then you progressively lose bone, and then you progressively stretch out ligaments, in that order. So, if you have arthritis on the inner side of your knee, which is the most common pattern, as the cartilage wears out, the bones go into a bow-legged position, and then, that bone wears, then you actually start to lose bone, and then eventually you actually start to stretch out the tissues on the outside of the knee just from tension, and then they become unstable. People feel the knees are wobbly or they’re afraid to go down a flight of steps normally or carry their laundry down a flight of steps. Or older people will fall.

What are some of the improvements that have been made in knee replacements?

The materials are better. Most of the tibial trays, the bottom pieces, are titanium nowadays, which is much friendlier to the bone than the hard cobalt chrome trays, which we used 20 years ago.

There’s a whole new technology of these metals, like Trabecular Metal — tantalum is the actual name of the element — that are very friendly to bone ingrowth. [After surgery, bone grows into and fills the majority of its available porous space, resulting in a stronger and more rapid fixation of the replacement.] It’s like an English muffin, it’s 80-percent air, but it’s
very strong, and it has the same flexibility as normal human bone. So we tend to use those bottom pieces for young people, with the thought that if it has to be redone in 25 or 40 years that there’ll be better quality bone there for us to work on.

The plastic in the knee replacements in particular has changed to a much tougher form of plastic that’s so-called cross-linked [designed to increase resistance to wear].

Our understanding of how to put in a knee has vastly improved. The way we put in knee replacements 25 years ago had much less insight into what a knee really needs than it does today. Twenty-five years ago, 80 percent of surgeons used to do what’s called a lateral release, where you had to release a big band of tissue on the outside of the kneecap to get it to track normally.

We thought that was just what you had to do in a knee replacement. And we found that we probably weren’t putting in the femurs in the right rotation. And now that we’ve corrected that [and] we have a little more insight into the way a femur should go on, most people do less than 1 in 100 [lateral release surgeries].

**What about hip replacements?**

In hip replacements, the advent of large diameter metal-on-metal articulations allows for severe activities like surfing or skiing or weight-lifting or running. You can play hockey or basketball or anything you want with a large diameter head metal-on-metal hip.

**Would you only give that to someone very active?**

It’s becoming more routine … You don’t put metal-on-metal hips in people with kidney failure, because their metal ion levels are high. And you don’t put it in women who want to have children, ’cause there’s some concern about how much metal passes through the placenta, although there have been over 1,000 babies born to women with metal-on-metal hips that have had no problems. But surgeons don’t like to do that.

I use them in young people who are active and demanding. I use them in old people who are forgetful [because they’re very hard to dislocate, to decrease the likelihood of dislocation]. I use them in other people who really like extreme positions, you know, like somebody who does a lot of Pilates and yoga, or likes to kayak, even if they’re not high-demand activities that require a severe positioning.

**I’ve read about a certain material in hip replacements that was causing a squeak?**
Ceramic balls on ceramic cups — those are the squeakers. There’s also metal on plastic, ceramic balls on plastic — those are OK, they don’t squeak — and metal on metal. And there’s no clear winner here. If we knew which one was better, then we’d all do the same one. It’s a changing field. There’s some experimental work on ceramic-on-metal now. I was just reading early data from a new FDA study on ceramic-on-metal hips. They look promising for the future.

You were involved in the development of a female knee. Is there a gender-specific hip?

That’s an interesting question. The FDA has not allowed companies to label a hip as a gender hip, but there’s a multitude of hips, including modular hips nowadays, that allow you to separate the width of the implant from the geometry of the ball and the neck of the hip, so those are in fact gender designs. Women’s hips tend to get wider with osteoporosis, out of proportion to the top part of the femur, whereas men’s don’t do that. ... There’s now a series of implants that are friendlier to female anatomy, without a doubt.

Are boomers responsible, directly or indirectly, for a lot of these advances?

First of all, most of the [people] at these different companies who are consultants and designers, who are trying to improve these things, are baby boomers.

What is a knee resurfacing?

Most knee replacements are in fact resurfacing operations, to remove a small amount of the surfaces of the bone. And then you fix into place, with cement or without, plastic pieces that look like the original. ... Now, there are knee replacements where you actually chop out a big hunk of bone and put in a new hinge, but those are usually for people who’ve had three or five failed knees, people who have tumors, people who have horrible fractures or infections, things like that.

And hip resurfacing?

In a hip replacement, you cut the ball out and put in a new ball. With hip resurfacing you resurface the ball rather than chop it out. The only advantage of [the latter], in theory, is that if you break your hip 20 years later, it’s easier to turn it into a hip replacement. The problem with hip resurfacings is they have a much higher failure rate than total hip replacements. ... The Wall Street Journal had a big article on it about a year ago [about how] they’re no longer recommended in women at all, no matter what age, because they have a much higher complication rate. You can’t do them on people with very abnormal anatomy. And it flies in the face of...
minimally invasive. My partners do them. I don’t do them at this point.

What can people do to try to help their joints?

Losing weight is probably the most important thing, and having moderate activity levels, sensible activity … walking, swimming, bicycling. Running is clearly not good for abnormal joints. If you have a normal joint, it’s fine to run. But if you have a diseased joint, it’s not a smart thing to do.

For women especially, what about keeping on top of osteoporosis?

Well, osteoporosis doesn’t relate directly to arthritis. But trying to minimize osteoporosis certainly makes it easier to do the joint replacement. Severe osteoporosis doesn’t prevent us from doing it, but it’s certainly easier when you don’t have it.

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