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Personal Health

by Jane E. Brody

For many with arthritis, new hips can mean an active life once again.

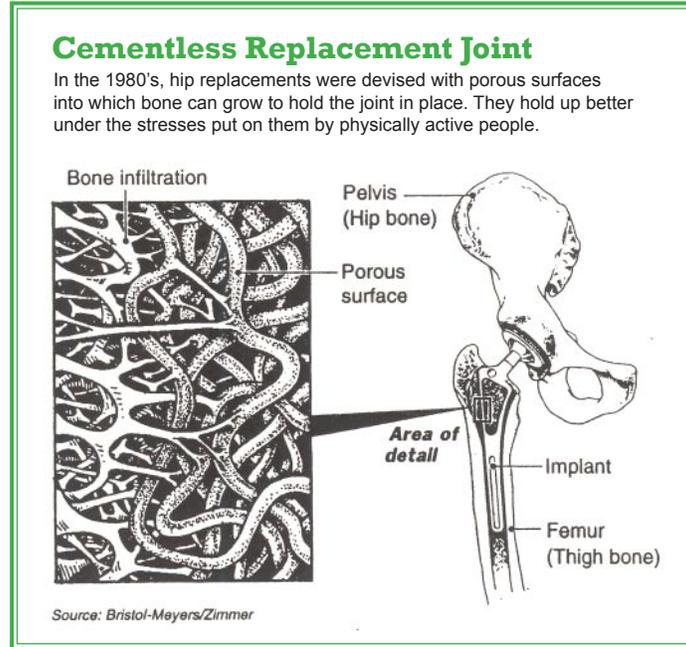
CHARLIE HAMM, the 59-year-old president and chief executive of the Independence Savings Bank in Brooklyn, is not the retiring type. He is an irrepressible leader, a champion of his borough and the people who live there. He has also been a life-long squash and tennis player, but his hips gradually became so stiff and painful he could hardly walk. So in January, Mr. Hamm joined about 125,000 Americans who will undergo hip replacement surgery this year. With two new titanium joints and daily physical therapy, he will soon be ready to engage in all kinds of activities that he has been watching from the sidelines for years.

The procedure was once limited almost entirely to people over 60, who would be likely to subject their new joint to less stress for fewer years than younger people. But improved techniques have removed the age barriers, and growing numbers of people in their 30's, 40's and 50's are rediscovering an active life after having crippled joints replaced with artificial ones. About one-third of hip replacements are now done on adults younger than 65.

Even 20 years after hip replacement surgery in which old methods were used in older people, 95 percent of the patients rated the results as better or much better than their condition before surgery, according to a study of 112 patients who were operated on at the Mayo Clinic in Rochester, Minn., in 1968 and 1969. And in a study of 180 patients who got new hips at the Hospital for Special Surgery in New York in 1988, more than 90 percent said they were satisfied with the pain relief, improved ability to walk and psychological benefits and would have the surgery again if necessary.

Although orthopedic surgeons who specialize in hip replacement do not encourage their postoperative patients to pursue stressful activities like football, basketball, downhill skiing, ice skating or singles tennis, some do return to vigorous sports, and a vast majority are able to be physically active; usually for the first time in many years.

Robert M. Doherty, then of Briarcliff Manor, N.Y., and an agent for the New York Life Insurance Company, was thrilled to find that after hip replacement surgery at the age of 57 and postoperative physical therapy, he was able to go back to playing golf and tennis. "With the latest techniques doctors are using today, it is amazing what can be accom-



plished," he said.

Bo Jackson, whose professional football career was abruptly ended by a routine tackle that severely damaged his hip, returned after hip replacement surgery to his first sport: baseball. In his first at-bat as a member of the Chicago White Sox, he hit a home run and sent the spirits of hundreds of thousands of hip replacement patients soaring. But experts fear that Mr. Jackson has also sent the wrong message to fellow patients because the demands of baseball will almost certainly shorten the life span of his new hip.

Getting a New Hip

Arthritis - rheumatoid in most younger people and osteoarthritis in those over 60 - is the most common reason for needing a hip replaced. Other candidates, also usually young, are athletes and accident victims with severe injuries to a hip joint. For those with arthritis, the surgery is usually recommended when the pain can no longer be managed by medication and the person's ability to meet the demands of life has become seriously impaired.

Total hip replacement results in an almost immediate transformation. It relieves pain, restores virtually all motion and dramatically improves the person's quality of life. Even among the elderly, about 90 percent are able to get along without assistance. The

replacements last, on average, 20 to 30 years, but they can last indefinitely.

The hip is a ball-in-socket joint, with the ball being the upper end of the femur (thigh bone) and the socket an indentation in the pelvis. Lining the end of the bone and the socket is articular cartilage, which acts as a cushion, keeping the bones from rubbing together. In osteoarthritis, with chronic wear and tear, the cartilage gradually deteriorates, resulting in grinding pain and inflammation with each movement of the hip joint.

The artificial hip replaces the damaged ball-in-socket joint. It has two main pieces. A nonreactive metal shaft, with a metal or ceramic ball at the top, is fitted into the thigh bone. The other half is a cup-shaped socket of tough plastic, encased in metal, into which the ball of the metal shaft fits.

The original hip replacements relied entirely on cement to hold the artificial joint in place. But through the years, pressure on the new joint often caused the cement to crack and the artificial joint to loosen. The younger the patient and the more vigorous the person's activities, the more quickly the artificial hip was likely to fail.

To get around this problem, surgeons devised a new technique in the 1980's: the cementless joint. Instead of being a smooth, solid piece, the cementless implant has a roughened, porous sur-

face into which bone can grow and hold the new joint in place. **Dr. Jacob D. Rozbruch**, former chief of orthopedic surgery at Beth Israel Medical Center North in New York, explained, "A special coating on the implant encourages the surrounding bone to grow into the prosthesis, making it an integral part of the body."

Cementless joints are now being used in most younger patients in need of hip replacement, among them Sandy Reynolds of Yorktown Heights, N.Y., who at 35 needed two new hips because of bilateral hip dysplasia, a hip deformity that she was born with, and Phil Bilba of New York City, who at 40 could no longer tie his shoelaces because of chronic inflammatory arthritis in his hip.

In some patients, especially those 50 to 70 years old, a combination of a cementless socket and a cemented thigh piece is often used, but in older patients, a totally cemented joint is: still preferred by most surgeons.

After the Surgery

Hip replacement does not end with the surgery. Physical therapy begins almost immediately, while the patient is still in the hospital, and continues after the patient leaves the hospital, usually within a week of the operation.

There are also some lasting precautions to consider. In addition to avoiding undue stress on the artificial joint, anyone with an implanted prosthesis has to be concerned about the possibility of infection. Since the new joint has no blood supply, it is not able to prevent the growth of infectious microorganisms. Any time such a patient has dental work or surgery (even minor surgery), or develops a bacterial infection or undergoes catheterization, a large dose of antibiotics must be taken to reduce the risk of a hip infection.

A single hip replacement costs about \$20,000 to \$25,000; annually, \$2.5 billion to \$3 billion is spent on such operations, most of which is paid for by Medicare and other health insurers. But Dr. Rowland W. Chang of Northwestern University Medical School has calculated that the procedure nearly always saves money. Over the remaining years of life for a 60-year-old woman, for example, more than \$100,000 would be saved in the cost of her care.

For more info on Dr. Rozbruch, visit www.JacobRozbruchMD.com