

## **Joint Benefit: Shoulder Replacement Improves Motion and Strength For Severe Arthritis and Fractures**

Rusty Lutz literally had a chip on his shoulder when he went to see orthopedist Dr. Bruce Wolock. Lutz had been enjoying boogie-boarding with his children in Ocean City when he stood up in the shallow water, and, suddenly, a six-foot wave came crashing down on him, driving his shoulder into the sand. The result: his shoulder joint suffered multiple fractures, including a bone chip that protruded from the top of the joint.

Though Lutz received temporary emergency care on the Eastern Shore, he quickly returned home to Columbia, where his sister-in-law, who is a nurse, recommended that he see Dr. Wolock, whose expertise includes joint care.

Wolock's first line of treatment was to surgically repair Lutz's fractured shoulder joint, to delay an inevitable shoulder replacement. That repair gave Lutz another five years with his natural shoulder, but then, as Wolock had predicted, Lutz's shoulder joint began to deteriorate and a shoulder replacement was his only option.

Prior to his accident, Lutz had never even heard that a shoulder replacement was a successful treatment option. Shoulder replacement is the third most common type of joint replacement surgery, and has excellent results. In general, joint replacement has become so successful that, more than 700,000 people have either hip or knee replacement surgery annually.

In comparison, about 25,000 Americans have shoulder replacement surgery a year. This is because "the shoulder is not a weight bearing joint, like the hips and knees are," says Wolock. "So, it is not subject to the same heavy wear and tear as the joints of the lower extremities."

Though the major reason for having shoulder replacement is osteoarthritis – the wear and tear type of arthritis - explains Wolock, other reasons include shoulder fractures and osteonecrosis, in which a decreased blood supply causes the bone to start to die and break down. Osteonecrosis may result from a dislocation or fracture, which is what happened to Rusty Lutz. But other risk factors are high-dose oral steroids taken for chronic medical conditions, such as rheumatoid arthritis or chronic obstructive pulmonary disease, or taken by athletes to build muscle for sports. Additionally, high-alcohol consumption creates the risk to develop osteonecrosis.

There's no question in Wolock's mind that our fitness-minded society is taking a knock on its shoulders. "Sports such as racquetball, tennis, squash, volleyball, as well as the throwing sports like baseball can take a toll on our shoulders," he explains.

Shoulder replacement materials are similar to hip and knee replacements. The socket is made of polyethylene and the stem and ball are composed of cobalt chrome.

In addition to these state-of-the-art materials, Dr. Wolock uses a team approach to manage a joint patient's care both before and after surgery.

“The two-hour operation is followed by an overnight stay, and most patients can return home the next day to begin gentle exercise. Formal physical therapy begins after their first post-operative visit, typically a week later,” explains Mary Jo Holloran, CRNP, who specializes in orthopaedics and participates in pre and post operative care, as well as the patient’s visits with Dr. Wolock. .

“The therapy phase takes about two to three months which includes a commitment to an intensive PT program to regain strength and range of motion,” says Wolock, “and a year to really forget that you even have a replacement.”

Lutz looks back and agrees it was hard work but the time and effort paid off. “I am happy I have the use of my shoulder again,” says Lutz. “It’s rewarding to feel as good as Dr. Wolock said I would feel. It was all worth it.

#### BOX:

##### **Reasons For Shoulder Replacement:**

- Degenerative joint disease (osteoarthritis)
- Rheumatoid arthritis
- Post-traumatic arthritis
- Massive unreparable rotator cuff tear combined with severe arthritis
- Osteonecrosis (the bone starts to die and break down)
- Severe fractures

#### SIDEBAR

##### **Heavy Weights & Hurting Shoulders**

The popularity of heavy weight lifting has created a new phenomenon of shoulder injuries in lifters. These joint injuries can be severe enough to require shoulder replacement. Dr. Wolock has seen injured shoulders in numerous patients whose regimen of lifting hundreds of pounds for years has taken its toll.

Dr. Wolock has this advice for weight lifters:

“There’s no question that once you’re past your teens and 20s in age, heavy weight lifting puts your shoulders through unnatural stress. As you get older, the body doesn’t repair as easily.”

He cautions men not to lift more than 100 pounds at a time. “Keep weight low, and increase the sets and repetitions,” he recommends. Those lifters who are over age 30 or who are not professionals “should not to lift to failure,” he cautions. Lifting to the maximum is especially tough on the joints.