**BOOM Magazine**

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**By Leaps and Bounds: Advances in Joint Replacement Help Maintain an**

**Active Lifestyle Longer**

They say you are only as old as you feel, but when your hips hurt and your knees ache it

can make you feel like you are more than just over the hill. In fact, it can make you feel

like you climbed over a mountain. But today’s seniors are active well beyond their

retirement years, even if their joints haven’t gotten the message. Often times, joint

replacement is the answer for the biking-jogging-swimming retirees of today.

The American Academy of Orthopaedic Surgeons (AAOS) calls total hip replacement an

orthopedic success story, "enabling hundreds of thousands of people to live fuller, more

active lives." The most current data from the AAOS shows that in 2004, about 234,000

hip joint procedures were performed and an incredible 478,000 knees were replaced in

U.S. hospitals. Hip and knee replacements can 20 years and beyond in about 80 percent

of those who have them.

Although able to remarkably improve daily living, artificial joints do have limitations.

Preoperative motion is restored through working closely with physical therapy after the

surgery, and the chance of infection or failure through wear or fracture is a risk. It is

important for anyone considering joint replacement to be educated and explore all of their

options.

**What is Joint Replacement?**

Joints are formed by the ends of two or more bones covered by tissue called cartilage.

Healthy cartilage serves as a protective cushion, allowing smooth movement of the joint.

If the cartilage becomes damaged by disease or injury, the tissues around the joint

become inflamed, causing pain. With time, the cartilage wears away, allowing the rough

edges of bone to rub against each other, causing more pain.

When only some of the joint is damaged, a surgeon may be able to arthroscopically repair

just the damaged sections. When large areas of the joint are damaged, a total joint

replacement is recommended. To replace a total hip or knee joint, a surgeon removes the

worn areas and precisely replaces them with artificial parts, called prostheses or implants.

It is important to realize that today’s joint replacement surgery has come a long way from

yesterday’s surgery. All aspects— from preoperative education, intra-operative technique

and postoperative analgesia – have been improved. The end result is faster recovery with

improved functional result.

**How Do You Know It's Time for Surgery?**

A common question asked is “can I wait too long to have surgery?” The answer is both

yes and no. There is an optimal timeframe for surgery, one that begins when your

symptoms affect your daily living. However, surgery should be strongly considered

before you experience a significant loss of motion or deformity of the joint. Prosthetic

replacement is very successful at relieving pain, less so at completely restoring lost

movement. Think of joint replacement as an elective procedure that is best performed

when you and your surgeon think you’re ready, not as a last resort.

And there should be no shame in opting for the surgery. The average patient takes

approximately a million steps a year. Most people would be hard-pressed to find any

mechanical device that has been used as much on an annual basis over decades that

requires no maintenance.

For more guidance, the Arthritis Foundation suggests if you are experiencing any of the

following signs, you should speak to your rheumatologist or orthopedic surgeon about the

possibility of joint replacement:

unable to sleep at night because of the pain;

a series of different medications have been tried that don't help alleviate the

pain, or the current medication no longer works;

pain from arthritis is keeping you from regular outings, such as visiting

friends, going shopping or taking a vacation;

activity is restricted to the point where you have trouble getting out of a chair,

going up stairs, getting off the toilet, or getting up from the floor.

**What to Ask Before Surgery**

One of the most important parts of the program at WakeMed is the education process

prior to joint replacement surgery. Patients attend a class where they have a chance to ask

questions and learn about the multi-disciplinary team that will be assisting them postoperatively.

This team includes the surgeon, nurse, physical therapist, occupational

therapist, total joint educator, and social worker. This team approach is really key to a

successful recovery.

**Rehabilitation and the Importance of Being Realistic**

While there are a number of great joint devices now available and the surgical techniques

have progressed, it will ultimately fall to the patient to take care of the joint. One of the

most important aspects of post-surgical recovery and rehabilitation is for the patient to

have a set of realistic expectations.

Most patients want to know how long their recovery process will be and what range of

motion will be regained. Every patient is different and it primarily depends on the

condition of the joint prior to surgery. While the first day or two after surgery may be

difficult, patients nearly always progress very quickly after that. Total recovery can take a

few weeks to a few months. And physical therapists really work with the patient and

family to customize the therapies for each patient’s home and work environments.

Most of today’s surgeries are now performed under a local block of anesthesia versus

general anesthesia allowing patients to recover much faster and begin rehabilitation

sooner. While the patient can expect to be released in less than a week after surgery,

outpatient physical therapy will continue for approximately six to eight weeks. In the

beginning, patients will use assistive devices such as crutches or a cane. The typical

course of recovery involves physical rehabilitation to build up strength and endurance to

protect the new joint while relearning many of life's routine activities, such as walking,

sitting and standing. The better physical condition a patient is in prior to surgery usually

improves the effectiveness of physical therapy after surgery.

Patients can expect roughly the same range of motion with the new joint as it was preoperatively.

The patients must be realistic in their expectations because this procedure

replaces bone and tendon and not the soft tissue surrounding the joint. The real benefit of

joint replacement surgery is the near immediate relief of pain that has previously eroded

the patient’s quality of life.

Joint replacement has proven to be very beneficial for those who have elected for the

procedure. It is relatively straightforward and has been proven to enable the patient to

resume an active, pain-free lifestyle. In fact, the National Institutes of Health report that

an overwhelming 90 percent of those who have joint replacement report fast pain relief,

improved mobility, and better quality of life.

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**Sidebar 1**

**Why Joint Replacement?**

According to the National Center for Health Statistics, arthritis is the second most

common chronic condition in the United States (sinusitis is first) affecting over 32

million people. Pain brought on by osteoarthritis that is severe enough to affect quality of

life tends to be the number one factor evaluated before joint replacement surgery is

recommended.

Osteoarthritis is a slowly progressive joint disease, marked by the breakdown of the

joint's cartilage. In addition to age and normal wear and tear, some people are born with a

deformed joint or defective cartilage, which can lead to osteoarthritis. Excess weight,

joint fracture, ligament tears, or other injury can also prematurely wear cartilage and

cause osteoarthritis.

Rheumatoid arthritis is an inherited condition that leads to premature wear of the joints.

Chronic inflammation of the joint lining causes pain, stiffness, and swelling. The

inflamed lining eventually invades and damages bone and cartilage. Rheumatoid arthritis

generally starts earlier than typical osteoarthritis, even affecting children and young

adults. Rheumatologists specialize in medication to reduce the early inflammation stages,

slowing down the onset of joint arthritis.

Other less common causes of joint arthritis include loss of bone caused by poor blood

supply, bone tumors, and traumatic injury such as a car accident or a fall.

Keep in mind that just because you have been referred to an orthopedic surgeon for

evaluation of your hip or knee, it does not necessarily mean that you will have to undergo

surgery. Depending on your amount of wear and symptoms, your surgeon may suggest

non-operative options that you can try such as inflammation-reducing medications,

injections, physical therapy exercises, and even weight loss.

**Sidebar 2**

The Arthritis Foundation also offers these questions to ask your hospital team about joint

replacement:

What makes someone a good candidate for joint surgery?

What are the risks involved in joint surgery?

Would there be any other non-surgical treatments I haven't yet tried that would

 ease my pain and help me move more easily?

How would surgery help my particular problem?

What would not change after the operation?

How long is the recovery process?

What is involved in the recovery process?

What type of procedure would you recommend for me?

How often in the past year have you performed this operation?

Can you tell me what the outcome (decreased pain, improved function) has been

 for most of these patients?

Can you provide the names of several people I could contact to discuss their

 experiences with surgery?