Bone & Joint News

TRI RIVERS SURGICAL ASSOCIATES

FALL 2003

Shoulder replacement

Atlas used his shoulder to bear the weight of the world for all eternity. You just want to reach a can of soup in the kitchen cupboard.

Standing between you and the cream of mushroom is degenerative arthritis.

A condition commonly associated with the hips and knees, arthritis can damage the cartilage in the shoulder joint, as well. The result can be chronic pain, weakness and difficulty performing everyday activities.

According to Trenton M. Gause, M.D., an orthopedic surgeon with Tri Rivers Surgical, many patients with shoulder arthritis now opt for the same treatment that has helped millions of hip and knee arthritis patients — joint replacement.

"Shoulder replacement can be an effective treatment for patients with advanced arthritis that doesn't respond to other therapies," Dr. Gause said. "Improvements in surgical tools and techniques have allowed us to offer this treatment to more patients, as well as achieve outcomes that are equal to or better than those associated with hip and knee replacement."

The shoulder joint — also known as the glenohumeral joint — is comprised of several components. The top end of the upper arm bone, called the humerus, is shaped like a ball. It fits neatly into the shoulder blade socket, also called the glenoid. Covering both the glenoid and the humeral head is a slippery coating of cartilage. Smoother than the surface of ice, cartilage allows the humerus to rotate freely within the glenoid.

Muscles, tendons and ligaments complete the setup — making it possible for you comb your hair, serve a tennis ball, reach into a cupboard or carry out hundreds of other tasks.

"Degenerative arthritis causes cartilage to become torn and rough," Dr. Gause said. "Not only can this be painful, but the damaged joint may also swell, creak, become stiff and lose its normal range of motion."

Shoulder replacement is considered when non-surgical treatments such as medications and physical therapy no longer control symptoms. During surgery, the physician removes the humeral head alone or both the humeral head and the glenoid, and replaces them with prosthetics engineered from metal.

The day after surgery, patients begin a program of physical therapy, structured to optimize strength and mobility. Following rehabilitation, patients may resume most activities, including participation in sports.

"Because we remove the damaged cartilage during surgery, patients experience relief from arthritis pain and other troublesome symptoms," Dr. Gause said.

Continued on page 3

HANDS UP!

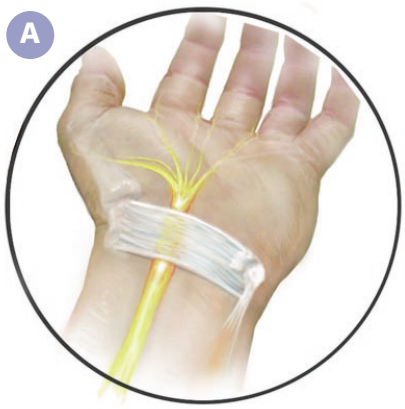
Don't surrender to these common conditions

This is a stick-up. Only instead of money or jewels, the thieves want something even more valuable — your hands.

These criminals are not your average cat burglars. They are common hand and wrist conditions that can grab your grip, walk off with your wave and heist your handshake.

"Our hands and wrists are some of the hardest working parts of the body and therefore some of our most valuable assets. But there are several conditions that, if left untreated, can rob you of function and affect your activity level," said William D. Abraham, M.D., orthopedic surgeon with Tri Rivers Surgical.

"Because we rely on our hands and wrists to complete so many daily functions, any abnormality may be a cause for concern," said D. Kelly Agnew, M.D., orthopedic surgeon with Tri Rivers Surgical. "The good news is that many common hand and wrist problems can be easily diagnosed and effectively treated by an orthopedic specialist."



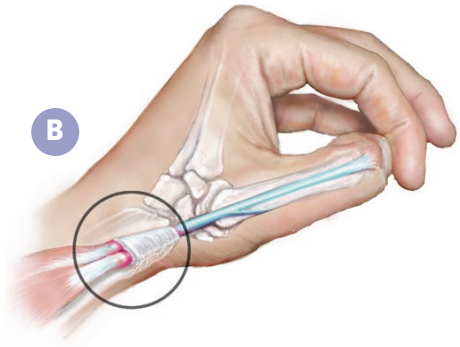
A. Carpal tunnel syndrome occurs when tendons within the carpal tunnel — a narrow passageway in the wrist — become inflamed and compress the median nerve.

"The median nerve is a major nerve that carries messages between the hand and the brain. When the median nerve becomes entrapped, tingling, numbness and difficulty holding and grasping objects may result," Dr. Abraham said.

To diagnose carpal tunnel syndrome, your physician will conduct a physical examination and may order diagnostic tests. Following diagnosis, he or she will recommend a treatment plan to reduce compression on the nerve. Treatment may include taking an oral anti-inflammatory medicine, wearing a splint to immobilize the wrist and reduce swelling, and in some cases, receiving a cortisone injection.

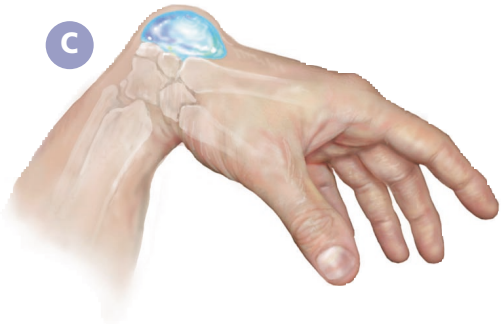
"Carpal tunnel syndrome can often be treated without surgery, but for some patients, a procedure called carpal tunnel release may be necessary," Dr. Agnew said.

If surgery is required, your physician can discuss what type of surgery is right for you.



B. Tendonitis of the wrist, or DeQuervain's stenosing tenosynovitis, is the inflammation of the tissue that surrounds the thumb tendons as they pass from the wrist to the hand. Pain when grasping or pinching and wrist tenderness are the most common symptoms of this condition.

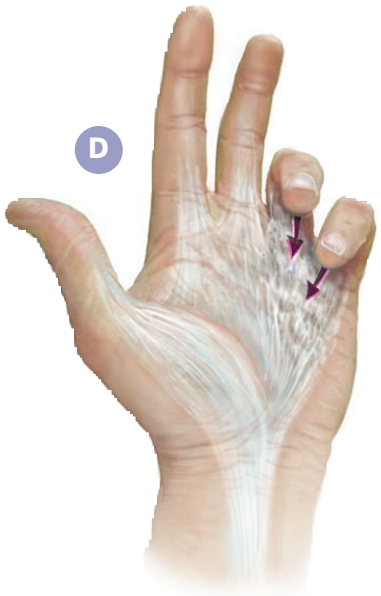
"Tendonitis is often caused by overuse, and initial treatment may include modification of the activities that produce symptoms," Dr. Abraham said. "In most cases, symptoms resolve with rest and the use of anti-inflammatory medications. Rarely, when conservative treatment is unsuccessful, surgery may be required."



C. A **Ganglion cyst** is the most common mass or lump in the hand. These benign, fluid-filled cysts most often occur on the back of the wrist, but they can also be found on the underside of the wrist between the base of the thumb and your pulse point.

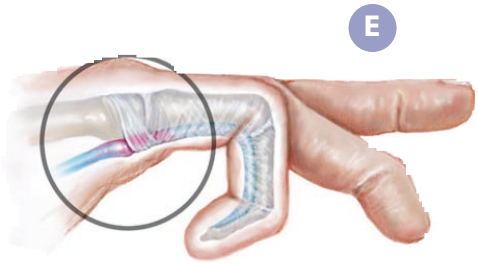
"The cyst may increase in size with activity and decrease with rest," Dr. Abraham said.

Many ganglion cysts do not require treatment or can be treated conservatively. If the cyst is painful or interferes with daily activities, your physician may choose either to aspirate the fluid using a needle or surgically remove the mass.



D. Dupuytren's contracture is a hereditary condition in which the tissue below the skin of your palm thickens. Some individuals experience small lumps of tissue while others develop very thick bands that may constrict tendons and pull the fingers permanently closed.

According to Dr. Agnew, there is little that can be done conservatively to treat Dupuytren's contracture. Large lumps and bands that interfere with hand function require surgical intervention. Unfortunately, even after surgery, the bands may reappear or occur in other fingers.



E. Trigger finger describes the condition in which the finger locks in a bent position and then suddenly extends as though a trigger were released.

"This condition results from an irritation of the tendons and pulleys in the hand that bend the finger," Dr. Agnew said. "When the tendon's slick lining becomes irritated, the pulley system doesn't move as smoothly, and catching and inflammation can result. Eventually, the finger can lock in a bent position."

After conducting a physical examination of the hand and finger, your physician can diagnose this condition. Initial treatment usually includes rest, splinting the extended finger, and taking oral anti-inflammatory medications. In persistent cases, your physician may give you a steroid injection to help relieve inflammation. This can relieve pain and locking for several months. When this fails, surgery can be performed to release the tendon.

Illustrations by Randy McKenzie, McKenzie Illustrations

avoid Downhill Disaster

Proper conditioning can help prevent ski injuries

You've waxed your skis, checked your bindings and bought your season lift ticket. But unless you've also prepared your body by building strength and flexibility during the off-season, you could be headed for a downhill disaster.

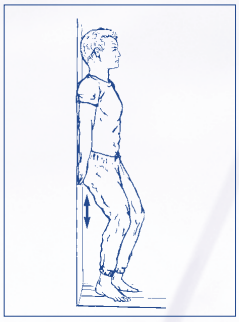
"Professional athletes know that preseason conditioning is essential for peak performance and injury prevention, but weekend warriors often hit the field, court or slopes without proper preparation," said Thomas S. Muzzonigro, M.D., orthopedic surgeon with Tri Rivers Surgical. "Unfortunately, this lack of conditioning can lead to minor aches and pains or a major sidelining injury."

According to Dr. Muzzonigro, skiing requires strength of the upper body, quadriceps, gluteal and low back muscles. Being out of shape increases your risk of injury.

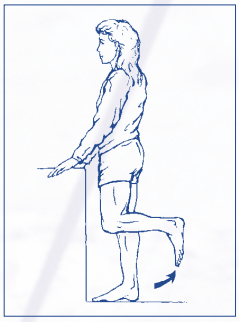
"Ideally, preparing your body for ski season should start long before the first snowfall. Your workout should include aerobic conditioning; as well as strengthening and flexibility exercises for the major muscle groups," he said.

Dr. Muzzonigro recommends including the following exercises in your pre-ski season program.

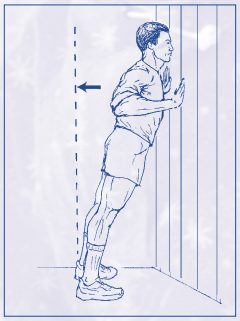
Quadriceps Stretch • Stand upright and hold onto a sturdy table or chair. Grasp one ankle with your hand and gently pull the heel toward your buttocks. Hold the stretch for 10 seconds. Repeat and switch legs.



Wall Slide • Stand with your back against the wall. Slowly bend your knees while sliding down the wall to a seated position. Maintain this position as long as possible and then straighten. Your goal should be to remain in the seated position for several minutes.



Hamstring curls • Stand upright, and hold onto a sturdy table or chair. Bend one knee to a 90-degree angle. Hold for 5 seconds. Relax. Repeat 10 times with each leg.



Wall Push-Up • With your feet and hands shoulder-width apart, place the palms of your hands on the wall. Keeping your knees straight and heels on the ground, bend your elbows, and lean forward as far as you comfortably can, then push away from the wall. Repeat 10 times.

Backward Bend • Stand with your feet shoulder length apart and knees slightly bent. Place your hands in the small of your back as shown. Bend gently and slowly backward at your waist, as far as possible. Return to the upright position. Repeat five times.

Shoulder **replacement**

Continued from page 1

As with the hip — another ball-and-socket joint — shoulder patients run a slightly higher risk of dislocation following replacement surgery.

Because the shoulder is not a weight-bearing joint, shoulder replacement patients are less likely than hip and knee replacement patients to require future revision surgery.

"With the hip and knee, a small percentage of patients eventually need surgery to replace the replacement joint, which can wear out over time," Dr. Gause said. "Revision surgery in the shoulder is much less common. The longevity of the replacement adds to the success of treatment."

Finally, patients should remember that the shoulder is one of the more complex joints in the body, Dr. Gause said. To achieve the best outcome, this surgery should be performed by a physician trained and experienced in the procedure.

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 18188 PITTSBURGH, PA

POSTAGE WILL BE PAID BY ADDRESSEE

TRI RIVERS SURGICAL ASSOCIATES INC
PASSAVANT PROFESSIONAL BUILDING
9104 BABCOCK BLVD SUITE 2120
PITTSBURGH PA 15237

Bone & Joint News

Tri Rivers Surgical Associates, Inc.
Passavant Professional Building
9104 Babcock Boulevard, Suite 2120
Pittsburgh, PA 15237

In this issue...

To learn more about joint pain, sports injuries and other orthopedic concerns or to receive a free subscription to *Bone and Joint News*, complete and return the following information.

Please send me information on:

☐ Arthritis/total joint replacement ☐ Joint fluid therapy ☐ Osteoporosis

☐ Sports injuries in young athletes ☐ Sports injuries in adults ☐ *Bone and Joint News*

Name_____

Address_____

City_____ State_____ Zip_____

Your name and address will not be shared with any other organization. F03/PS

TRI RIVERS
Surgical Associates, Inc.
Bone and Joint Medicine and Surgery

Orthopedic Surgery
W. Scott Nettrour, M.D. • Lewis F. Nettrour, M.D.
Michael W. Weiss, M.D. • D. Kelly Agnew, M.D.
William D. Abraham, M.D. • Trenton M. Gause, M.D.
Thomas S. Muzzonigro, M.D. • F.X. Plunkett, M.D.

Locations
North Hills • Butler

Contact us
Toll free at 1-866-874-7483
www.tririversortho.com info@tririversortho.com