



Taos Orthopaedic Institute

Research Foundation News

TOIRF on the Web: www.taosortho.com

Understanding Knee Surgery Alternatives

Satellite Clinics

Las Vegas, New Mexico

Los Alamos, New Mexico

Raton, New Mexico

To Schedule at satellite clinics or in Taos, patients must telephone

(505) 758-0009

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Before deciding on knee surgery, Taos patients may consider several knee surgery alternatives to relieve the pain and inflammation in your knee.

Lifestyle Modification

The first alternative to knee surgery is lifestyle modification. This may include weight loss, avoiding activities such as running and twisting which can aggravate the knee injury, modifying exercise to no- and low-impact, and other changes in your daily routine to reduce stress on your knee.

Exercise and Physical Therapy

Exercise and physical therapy may be prescribed to improve strength and flexibility. Exercises may include strengthening exercises such as riding a stationary bike, and stretching exercises such as flexing the ankle up and down, tightening and holding thigh muscles, sliding the heel forward on the floor, leg lifts, and knee extensions.

Exercise can strengthen your leg muscles and reduce your pain. If you really need knee surgery, this may not help, but many forms of knee pain can be mitigated by exercise.

Pain Medications and Anti-inflammatory Medications

Arthritis pain is caused by inflammation in the knee as the bones rub against each other due to eroded cartilage. Reducing pain and inflammation of the tissue in the knee can provide temporary relief from pain and delay knee surgery.

For most patients, Tylenol is a safe pain medication. Anti-inflammatory medications (non-steroidal anti-inflammatory drugs or NSAIDs) such as Ibuprofen (Advil or Motrin) or Naproxen (Aleve) may also provide relief from pain and swelling. New NSAID medications called Cox-2 inhibitors may also be used to reduce inflammation, reducing pain temporarily. Cox-2 inhibitors such as Celebrex, Bextra, or Vioxx may be safer (but more expensive) than traditional NSAIDs. A corticosteroid injection may also be used to reduce pain; in this procedure a powerful anti-inflammatory agent is injected directly into the joint.

Glucosamine/Chondroitin

A dietary supplement called glucosamine/chondroitin may improve the joint's mobility and decrease pain from arthritis of the knee. Glucosamine and chondroitin sulfate can slow the deterioration of cartilage in

the joint, reducing the pain of bone on bone. Both are naturally occurring molecules in the body. Glucosamine is thought to promote the growth of new cartilage and repair of damaged cartilage, while chondroitin is believed to promote water retention, improving the elasticity of cartilage, and also to inhibit cartilage-destroying enzymes.

Joint Fluid Therapy

While medications and supplements can be helpful in reducing inflammation and pain and help you delay or avoid knee surgery, there are trade-offs. Drug therapies may have systemic side effects, and there is a limit to how much pain reduction can occur.

In a procedure called joint fluid therapy, a series of injections is made directly into the knee. This therapy is designed to reduce pain by improving lubrication in the knee, replacing the synovial fluid that lubricates the knee. Hyaluronate or hyaluronic acid (HA) is used for the treatment of osteoarthritis knee pain in patients who have failed to get adequate relief from simple painkillers or from exercise and physical therapy.

A solution made of highly purified, sodium hyaluronate is used in this procedure. HA is made from a natural chemical found in the body and is found in particularly high amounts in joint tissues and in the fluid (synovial fluid) that fills the joints.

The body's own hyaluronan acts like a lubricant and shock absorber in synovial fluid of a healthy joint. Osteoarthritis reduces your synovial fluid's ability to protect and lubricate your joint.

A physician administers an injection of HA solution into your knee once a week for 5 weeks (a total of 5 injections). This helps to re-lubricate your knee and reduce the pain of osteoarthritis, possibly delaying or helping you avoid knee surgery. The series of 5 injections can last for 1 year and be repeated each year.

Bracing

A brace may be used to provide external stability to the knee joint. Braces are devices made of plastic, metal, leather and/or foam and are designed to stabilize a joint, reduce pain and inflammation, and strengthen the muscles of the knee. By putting pressure on the sides of the joint, the brace causes the joint to realign, which in turn decreases the contact between the two rough bone surfaces and reduces the pain while increasing mobility.

Taos Orthopaedic Institute Research Foundation

TEACHING

Dan Guttman, MD 2003

Participant, Mayo Clinic's Teachers
Instruct Teachers
on Elbow Surgery,
Rochester, Minnesota

Director, Masters Course in
Shoulder Arthroscopy,
Scottsdale, AZ

Course Faculty San Diego
Shoulder Course,
San Diego, CA

Dr Guttman has also been
featured as a "Shoulder Hero" by
www.shoulder1.com

James Lubowitz, MD 2003

Instructor, Arthroscopy Journal
Course for Writers and Reviewers.
Arthroscopy Association of North
America Annual Meeting,
Scottsdale, AZ

Associate Master Instructor, Knee
Advanced Course, Orthopaedic
Learning Center, Rosemont, IL

Course Faculty, Hips and Knees in
San Juan de Cabo, Mexico

Knee Lab Instructor,
Arthroscopy Association of North
America Fall Course,
New Orleans, LA

Dr Lubowitz has also been
featured as a "Knee Hero" by
www.knee1.com

John B. Reid III, MD and Darby Webb, MD have been selected as the sixth and seventh Taos Orthopaedic Institute Research Foundation Annual Sports Medicine Fellows. The Arthroscopy Association of North America accredited Fellowship Training Program allows participants to study advanced knee, shoulder and elbow surgical techniques. In addition, Fellows assist in caring for the New Mexico Highlands University Department of Athletics and local high schools. Finally, the Fellows participate in prospective clinical and basic science research investigating arthritis and athletic injuries involving the musculoskeletal system.



John B Reid III

Jeb Reid was raised in Amherst, Massachusetts. Reid is a recent graduate of the Orthopaedic

Surgery Residency and Training Program at Oregon Health Sciences University (OHSU) in Portland, Oregon and was winner of the 2003 Beals Resident Research Award and the 2002 Frank B. Smith Memorial Resident Research Award. Reid completed his General Surgical Internship Training at OHSU and also graduated *Cum Laude* from the OHSU School of Medicine where he was elected to the *Alpha Omega Alpha* medical honor society. He attended college at both University of Delaware in Wilmington, Delaware and at American University in Washington, D.C. Of note, Reid served for two years as a member of the Squaw Valley Ski Patrol at Lake Tahoe, California.

Joining Reid in his move from Portland is his wife Nye, daughter Aquene (7) and son Rec (4). Nye, a former kindergarten teacher, currently works as a freelance photographer. The Reid's personal interests and hobbies include skiing, snowboarding, mountain biking, photography, working with wood, and auto mechanics.



Darby Webb, MD

Darby Webb, a native of Atlanta, Georgia, completed high school in Columbia, South Carolina. Webb is a recent graduate of the Tulane and Charity Hospitals Orthopaedic Traumatology Fellowship Training Program in New Orleans, Louisiana. She is a graduate of the Medical University of South Carolina (MUSC) Orthopaedic Surgery Residency and Training Program, She also received her Doctor of Medicine at the MUSC where she was elected student body President, was elected to the *Alpha Omega Alpha* medical honor society, and where she received the H. Rawling Pratt-Thomas Service and Leadership Award.

Personally, Darby enjoys water skiing, snow skiing, running, hiking, fishing, and biking.

Where Are They Now

Michael M Karch, MD:

Mammoth Mountain Orthopaedics

Mammoth Lakes, California

Robert D Graham II, MD:

Hill Country Sports Medicine

San Marcos, Texas

Michael J. Rossi, MD:

Wenatchee Valley Clinic

Wenatchee, Washington

Bradley S. Baker, MD:

Sioux Valley Sports

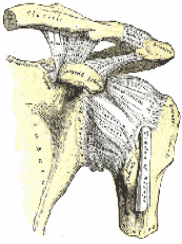
Sioux Falls, South Dakota

E.Ladd Jones III, MD:

Charlotte Orthopaedic Specialists

Albermarle, North Carolina





The shoulder has the most motion of any joint in the body; however, it is also the joint most susceptible to instability. **Dislocation** of the shoulder joint, which occurs when the ball (head of the humerus bone) pops out of the socket (glenoid cup of the scapula bone), is common. When the shoulder dislocates, the rim of soft tissue called the labrum, which surrounds the glenoid, rips and tears. The labrum and the attached ligaments act like a bumper which helps keep the ball stabilized in the cup. When the labrum is torn, dislocation can commonly happen over and over again.

Disappointing Natural History

When a younger person dislocates their shoulder, the recurrence or **re-dislocation rate may be as high as 90%**. In addition, in those patients who don't have recurrent dislocations, activities like sports or throwing must frequently be modified as well as other activities of daily living. Some patients even have difficulty sleeping comfortably. When a patient who is older than 40 years old suffers a shoulder dislocation, the rotator cuff (the main tendons and muscles which move the shoulder) may tear. In either case, without repair, continued instability and disability may result.

History of Shoulder Pain and the Throwing Athlete

Sometimes, the head of the humerus bone may only partially slide out of the socket. This **partial dislocation is known as a subluxation**. Repetitive overhead throwing, serving as in tennis or volleyball, weightlifting or swimming can cause the subtle instability resulting in subluxation. Accidents may also cause injuries to the labrum and result in subluxations. Patients may note pain or weakness and may not fully appreciate that the problem is their shoulder sliding out of the joint.

Patients commonly complain of symptoms of a loose shoulder joint. They may experience popping or grinding or pain in certain positions. Patients may feel afraid to use their arms in certain ways. Athletes may complain of a dead arm, weakness, pain or fatigue in their shoulder. Most patients who have had even one dislocation will tell you that it is extremely uncomfortable.

Treatment

The goal of shoulder stabilization is to restore stability, strength, function and provide pain relief. While non-operative treatment is preferred in most cases, surgery is recommended when non-operative management fails. In addition, because of the high risk of recurrence, **surgery is recommended for patients with dislocation who are less than 25 years old. Surgery is also recommended for older patients who suffer a tear of the rotator cuff.**

Minimally Invasive Repair

The good news is that new developments in **minimally invasive arthroscopic techniques are now used to perform repair of the torn shoulder labrum or rotator cuff**. Taos Orthopaedic Institute Research Foundation's Dan Guttman, MD, is nationally recognized as a specialist in arthroscopic shoulder repair and is sought out as an instructor, teacher and lecturer where he shares his expertise. With arthroscopic surgery, smaller scars, reduced pain, faster rehabilitation and lower rates of complications tip the balance in favor of repair for a patient with shoulder dislocation or an athlete with subluxation.



"The Skier's Knee"

Taos Orthopaedic Institute Research Foundation is proud to announce publication of, **"The Skier's Knee: A Current Concepts Review"**. Former Fellow Michael J. Rossi, MD co-authored the manuscript with Directors James H. Lubowitz, MD and Dan Guttman, MD. "The Skier's Knee" is published in the January, 2003 issue of *Arthroscopy: The Journal of Arthroscopic and Related Surgery*. *Arthroscopy* is the official journal of the Arthroscopy Association of North America and the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sportsmedicine.

According to the authors, "A greater understanding of the epidemiology and mechanisms of knee injuries in skiers will aid arthroscopic clinicians and related researchers treating or investigating knee injuries in both skiers and in athletes in general."

Mini-Incision Total Knee Replacement

While Total Knee Replacement (TKR) is traditionally performed through a large, tendon-cutting incision, **minimally invasive surgery (MIS)** can now be performed via a 4-5 inch tendon-sparing mini-incision. The result: less patient pain, shorter hospitalization and faster recovery and rehabilitation!

James H. Lubowitz, MD is a designer, industry consultant and educational course Faculty member for MIS, and Holy Cross Hospital in Taos is a national surgeon visitor site for MIS instruction.

Mini-incision Total Knee Replacement has been performed in Taos since 2003. Dr. Lubowitz is one of the first surgeons in the nation and believed to be the first surgeon in New Mexico to offer his patients MIS TKR.



Taos Orthopaedic

Institute

Research Foundation

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**Prevention, treatment,
and rehabilitation**

TOIRF on the Web: www.taosortho.com

About...

Taos Orthopaedic Institute Research Foundation

MISSION

To expand research and education in the areas of sports injury and arthritis.

GOAL

To improve quality of life for patients and sufferers.

FOCUS

Prevention, treatment, and rehabilitation.

PROGRAMS

The advancement of scientific knowledge occurs most effectively in an atmosphere of fellowship.

- * Two annual Orthopaedic Sports Medicine Fellowship positions allow a Board-certified or Board-eligible orthopaedist to conduct clinical and

basic science research and receive specialized clinical training under the supervision of the Directors.

- * One to four week intensive Research Fellowships allow scientist and clinicians to conduct research in collaboration with the Directors and Annual Fellows.
- * A high school program allows students with interest in health care to participate in foundation research.
- * Continuing Education Programs for health care professionals promote exchange and discussion of research advances. Educational seminars for the general public enhance community wellness
- * A foundation newsletter communicates ideas and activities to patients and friends.

STRUCTURE

An administrative Board represents the diverse interests and needs of the community, identifies opportunity for service, and functions as ambassadors of the Foundation.

A Science Advisory Board, composed of medical scientists from across the country, guides research by providing suggestions regarding topics, protocols, allocation of resources and future directions.

TO CONTRIBUTE

TOIRF is a nonprofit, 501(c)(3) educational organization. Tax deductible donations of any size directly support arthritis and sports medicine research