Hip Arthroscopy

Hip Arthroscopy Center at Southern California Orthopedic Institute
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Introduction

This booklet will provide a general guide to the common indications for hip arthroscopy, what to expect if undergoing the surgery, the significant risks, and a general guide to the expected recovery pathway. This document is not by any means fully comprehensive, and any specific questions should be addressed with your surgeon. The development of the techniques has improved dramatically over the last few years and this has allowed surgeons to improve the treatment of hip injuries.

Normal Hip Joint

The hip joint is like a ball in a socket, with the femoral head being the ball and the acetabulum being the socket. The joint is a very stable one. Despite this, some patients develop symptoms from tears of the labrum and other problems associated with the shape of their hip.

Indications for Arthroscopy

Since the early 20th century, when hip arthroscopy was regarded as being almost impossible to undertake, the procedure has developed in leaps and bounds. Presently there are many reasons for recommending a hip arthroscopy. Some of the more common problems are:

1. To explain unexplained hip pain (diagnostic hip arthroscopy)
2. Removal of loose or foreign bodies
3. Repair of damaged articular cartilage
4. Removal or repair of a torn acetabular labrum
5. Correction of femoroacetabular impingement (FAI)
6. Management of damaged hip ligaments
7. Management of hip joint infection
8. Inflammation of the hip lining (synovitis)
9. Investigation of a painful joint replacement or hip resurfacing

Perhaps the two most common current indications for hip arthroscopy include FAI and an acetabular labral tear. These injuries commonly occur at the same time. These two problems are discussed in more detail below.

Femoroacetabular Impingement (FAI)

- FAI is a condition affecting the hip joint (Figure 1) and is characterized by abnormal contact between the femoral head (hip ball) and the rim of the acetabulum (hip socket) leading to damage to the articular cartilage (lining).
in the acetabulum, or to the labrum of the hip, or both. The labrum is a ring of cartilage that surrounds the acetabulum. The labrum serves to deepen the socket and maintain a normal joint. Damage to the labrum and/or articular cartilage will likely cause pain and is often the reason a patient will come to the office.

An abnormality in the shape of the femoral head or acetabulum, or both, may cause FAI. Activities that involve recurrent hip motion can increase the frequency of this abnormal contact, e.g. kicking sports. FAI generally presents in three forms: cam impingement, pincer impingement and mixed impingement (involving both cam and pincer type).

FAI can affect all age groups from the early teens to throughout adult life and is being increasingly recognized as one of the predisposing factors for osteoarthritis of the hip. It is felt by many that without early intervention surgery, there is a high likelihood of developing osteoarthritis (‘wear and tear’). Hip arthroscopy can be used to reshape the femoral head and socket to prevent impingement, and aims to protect the hip from developing osteoarthritis, as well relieving current symptoms.

**Acetabular labral tears** - The labrum can be torn. This is usually associated with FAI, but not always. With hip arthroscopy, the labrum can be either debrided (remove the damaged tissue only) or repaired. Occasionally a labrum can also be grafted. MRI and/or CT scans, although often performed before hip arthroscopic surgery is undertaken, do not always reveal every labral tear.
Which Patients Should Consider Hip Arthroscopy?

Patients with symptoms of hip pain that have not responded to conservative treatment and have not had a cause demonstrated by standard radiographs, might be candidates for a hip arthroscopy. In addition, sensations of "popping", "snapping", or "clunking" in the hip joint can be treated with arthroscopy. A loose body in the hip joint can cause all of the above symptoms, as can a tear in the lining of the rim of the hip socket (labrum). A variation in the shape of the hip socket, called femoroacetabular impingement (FAI) can also be treated arthroscopically. A preoperative MRI with gadolinium or hip arthrogram can help to confirm the diagnosis of these problems prior to the arthroscopy. Arthroscopy has also been used to diagnose and evaluate diseases such as Rheumatoid Arthritis, Juvenile Rheumatoid Arthritis, Perthes Disease, Synovial Chondromatosis, and Ankylosing Spondylitis of the hip.

Preparing Yourself and Your Home Before Surgery

Recovery is a gradual process and will take time after surgery. Plan for your return home before you enter the hospital. Most patients return home the same day of the surgery.

- Ask your spouse, children or friends if they can assist you with activities of daily living for about two days.
- Before surgery, it may be helpful to practice daily activities that will be affected by surgery.

If you are interested in assistance from a home healthcare agency or public health nurse, select the agency before hospitalization. Your doctor’s office can help you with these arrangements. Most of the time, your insurance will cover the cost of home health care for a few days (7-10) after surgery. It can be arranged that you have a nursing assistant come to your house and help with day to day things you may need as well as help with physical therapy exercises.

- Anticipate temporary changes to your activity level.
- Plan to leave your home clean and in order.
- To prevent falling, remove throw rugs and excess clutter from traffic paths.
- Place a sturdy armchair in your living room near a table so that magazines, hobby supplies, TV remote, telephone (a cordless is a good idea) or other items you want can be within reach.
- Rearrange your kitchen so that often-used utensils are easily accessed. Place them at a height so that you do not need to bend or reach to get them. It also would be helpful to have a sturdy chair available in the kitchen.
- Prepare some meals in advance and freeze them.
• If possible, ask your mail and newspaper carrier to deliver to the door.

• Ask your church or synagogue to arrange visits while you recover, if desired.

What to bring to the surgery center

• Remember to bring your crutches and support stockings!

• Leave your valuables at home.

• Do not bring your medicines that you usually take. It is important to have a list with the appropriate dosages. This will be requested from you at the time of registration.

• Comfortable, non-skid walking or athletic shoes. Elastic laces are available, eliminating the need to tie your shoes. Athletic shoes are available with hook and loop fasteners. Another option are slip-on shoes or slippers.

• Clothes that are soft and loose fitting. Women can bring pants with elastic waistbands. For men, gym pants are easiest.

Your Surgery Center Stay

You will be provided a time to come to check in to the surgery center. It is important to follow these instructions:

• You should stop all medicines that have a potential to cause bleeding about 7 days before. The most common medicines that fall into this category include aspirin, antiinflammatories (such as Advil, Motrin, Naprosyn) and blood thinners such as Plavix and Coumadin.

• Supplements: In general, you should discontinue all herbal and over-the-counter supplements one week before surgery. You may continue multivitamins, but nothing else. Some supplements affect bleeding tendencies and may cause problems with wound healing.

• Before surgery, do not eat or drink anything after midnight. Your stomach must be empty before you receive the anesthetic. This helps prevent nausea, vomiting and other complications during and after anesthesia.

• Take a shower or bath the evening before surgery. This will help decrease the amount of bacteria on your skin.

• A good night’s rest is important before surgery.

• Do not wear makeup the morning of surgery.

• Take only the medication your physician or nurse tells you to take on the morning of your surgery. (with a small sip of water)
Morning of Surgery

• After admission, the nursing staff will take your temperature, pulse, respiration rate and blood pressure.
• Anti-embolism or support stockings will be provided to promote circulation to the legs.
• The anesthesiologist will discuss the type of anesthesia to be used.

Going to Surgery

• You will be asked to empty your bladder.
• Remove all jewelry (including rings), dentures, and contact lenses.
• You may wear your glasses/hearing aid if necessary.
• You will walk back to the operating room.
• An intravenous (IV) line will be started before surgery.
• The affected hip may be scrubbed and shaved to prepare for surgery.

Anesthesia

The surgery is most commonly performed under general anesthetic. In most cases after the general anesthetic is given there is an additional regional local anesthetic block that is performed. Most commonly, a lumbar plexus block will be performed in order to help with postoperative pain. Most patients wake up with no pain and only experience pain about 12 hours later. As a result, your leg muscle may not work effectively for a couple of days.
**Hip arthroscopy**

**FIGURE:** Xray guidance for entry into the joint.

The bones of the hip joint (the ball and socket) are separated by approximately 1cm (1/2 inch) by applying traction to the foot while wearing a special boot. The joint entry is guided by xrays (above figure) Distracting the hip provides room for a small tube (‘arthroscope’) to be introduced into the joint. Initially, air and/or fluid are injected into the hip, under x-ray guidance. Once correct placement of the instrument has been confirmed, two, three, or sometimes four small incisions are made around the hip. Each of these incisions generally measures approximately 5 to 10 mm (less than ½ inch) in length.

Through these small holes, the telescope and instruments are passed into the joint. The surgeon will then be able to see the hip joint, identify the problem(s), and complete the repair. The operation duration will vary depending on the problem in the hip joint but can last from 30 minutes to 120 minutes. During the surgery, further x-rays may be taken.

**FIGURE:** Instruments in place with the joint distracted.

Depending on the problem encountered, your surgeon will perform the appropriate procedures. In most cases, there is a labral tear, which is either taken out (debrided) or sometimes repaired back to the bone with a small anchor that is placed into the acetabulum.
Types of Procedures

Cam FAI
Most commonly the procedure that is performed is a femoral neck resection. The procedure involves visualizing the abnormal (extra) bone as shown below

FIGURE: Area of cam impingement (arrow) before removal.

FIGURE: The area of cam impingement has now been removed.

FIGURE: Area of bony impingement is now removed (arrow).

Once the area is exposed, your surgeon will use the view from the camera as well as xray guidance to remove the bony ridge.

Pincer FAI
In these cases, the problem is extra bone on the acetabular (cup) side of the joint. The surgeon will remove excess bone from the acetabular rim (see figures below) and then repair any cartilage problems that are seen at the same time. In approximately 20% of the cases, there is a coexistent problem of cam impingement that is dealt with as described above.
Labral Tears

The most common reason for arthroscopic surgery of the hip. Many patients have some impingement that may be addressed at the same time as the labral tear. The tear, however, is the reason that the hip is painful or causes feelings of giving out or catching. The normal labrum (Figure) has a smooth surface and serves to both stabilize the joint as well as maintain normal joint fluid around the cartilage surface.

Figure: Normal labrum. (acet= acetabulum)

In most cases, the surgery involves debridement (removal) of the labral tear. This is accomplished with the use of a small (5mm) motorized shaver that is inserted into the joint.

Figure: Torn hip labrum
In some cases, the tissue is repaired back to the hip socket. This occurs in cases where the tear is larger and where the tissue is healthy enough to repair. This is accomplished with the use of an anchor that is placed in the bone. The anchor has suture material that allows the surgeon to sew the tissue back into place (figures).

**Figure:** Torn labrum before repair. Note the anchor (arrow) that has been placed in the bone.

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**Figure:** Torn labrum after repair

Risks Associated with Hip Arthroscopy

There are few risks associated with hip arthroscopy. Those reported include nerve injuries, traction injuries, pulmonary embolism (blood clots), and reflex sympathetic dystrophy (RSD). RSD is a rare chronic pain syndrome with uncertain cause. Other potential complications include bleeding, infection, wound healing problems, and the risks of anesthesia (including death). Any of these will occur less than 1% of the time. The most commonly encountered issue is that of numbness of the front of the thigh into the inner leg. This is associated with the incisions that are made and their proximity to a small nerve that runs in the area. Most commonly, any numbness that occurs will go away over one week or so. In some cases there is a small area that may continue to be numb for several weeks. Very rarely, there is a permanent patch of numbness that will remain. This is typically very small and is about the size of a quarter.

Realistically, some patients simply do not get the pain relief from the operation that is expected. The reasons for this problem are usually associated with more extensive arthritis than was noted on preoperative studies such as x-rays and MRI. In those cases, patients may go on to experience debilitating pain that requires a hip replacement operation.
What to expect After Surgery

After surgery, you will be moved to the Post-Anesthesia Care Unit (PACU). Your relative will be told when you are in the PACU. One of the most important functions of the PACU is to manage pain and nausea as you awaken from anesthesia. Nurses will monitor your vital signs, alertness, pain or comfort level and need for medications.

In the PACU, you may notice a variety of equipment. The room is brightly lit, and as you awaken the noises may seem louder than usual. If you feel cold, blankets are available. It is normal to receive oxygen through a facemask.

The average length of stay in the PACU is one hour. If there is an extended delay, your relative may check with the nursing staff. When the anesthesiologist decides you are ready to leave, your family member will be notified and you will be transported via wheelchair to your car.

The First Two Days

After you return home, keep an eye on the color, warmth, movement and sensation of your leg and toes. You will begin to experience some pain over the first few hours to the next day or so, depending on the effectiveness of any nerve block that you have been given during the surgery.

Circulation Aids

Circulation aids promote the return of blood to the heart and decrease your chance of developing a blood clot while you are less active after surgery.

Support stockings (TEDs) are one type of circulation aid. You should wear the stockings for about two weeks or until you are actively walking independent of crutches. You can take your stockings off to shower, but should apply them afterwards. They should be worn for two weeks on the side of the surgery.

Exercise

Exercising your legs after surgery is one way to promote blood flow and decrease your chance of developing a blood clot. To exercise your feet:

- Push your toes toward the end of the bed.
- Pull your toes up toward the head to the bed
- Relax.
- Repeat 10 times every hour you are awake.

To exercise your legs:

- Lie on your back.
- Tighten the muscle on top of your thigh by pressing your knee down toward the bed.
- Hold for five seconds.
- Relax.
- Repeat 10 times on each leg every hour you are awake.
Crutches

You will be provided with a set of crutches. It is really important to use them for the first two days as a result of the dysfunction of your leg muscles immediately following surgery. You will have a sense that your leg is working properly, but in many cases the function is impaired and lack of support with crutches will lead to a fall, potentially damaging the surgery or causing other damage to yourself.

Your doctor will discuss the length use of the crutches either with your or your family member that is present at the surgery. The nursing staff will also communicate the length of time that you will be using the crutches. If there is any doubt, you should continue to use the crutches until you have spoken with the doctor or a member of our staff that has confirmed the time that they will be used to protect your surgical procedure.

Pain

It is normal to feel pain or discomfort after surgery. Tell the nurse if you are having pain or discomfort. When you have pain, your nurse will ask you to rate your pain on a scale of zero to 10 (0= no pain, 10= worst pain imaginable). Your pain may not be totally relieved. However, pain medication can be given to make you more comfortable. Tell your nurse if you experience any other discomfort. If you suspect the pain medication is causing any nausea or other symptoms, let your nurse know. There are many different medicines that are used for pain control and these are all available to you while you are in the surgery center or hospital.

Ice, no heat!

Not only in the immediate phase, but for six weeks after surgery:

Apply ice to your hip before and after exercise to reduce pain and swelling.
Do not put a heating pad on the joint as heat will increase swelling in the joint. A good rule of thumb is to use an ice pack twenty minutes out of every hour, applied to the front and side of the hip, directly over the bandage.
Physical Therapy

After surgery, you should begin your formal physical therapy program within the first week of the surgery. You will be given a prescription for therapy at your preoperative appointment so that you can set up your rehabilitation program prior to your surgery. It is ideal to have visits set up with your therapist so that you begin within the first week.

At your first appointment a physical therapist will examine you. Physical therapists are trained professionals in rehabilitation. With direction from your surgeon, they will determine an exercise program for you.

To increase your comfort during exercise, you may want to talk with your nurse or therapist about taking pain medication 30 to 45 minutes prior to your physical therapy sessions.

Your physical therapy program will include “passive” and “active” exercises for your affected hip. Your therapist will gently perform “passive” exercises with your leg in order to maintain your hip motion and minimize irritation of the injured soft tissues. In these exercises, you relax and the therapist carries the weight of the leg through various movements. He or she also will teach you “active” exercises (those you can do by yourself). Your therapist will check your progress and will keep your surgeon informed should there be any abnormal issues that develop.

If possible, a member of your family or a friend should accompany you to some physical therapy sessions to learn the exercises you should do at home. Your friend or family member will practice these exercises at your sessions, under the supervision of the physical therapist. The therapist will give you and/or your relative or friend verbal and written instructions on how to assist you with these exercises.
**Discharge Instructions**

**What if I need help at home?**

Your healthcare team will help you and your family plan your home care. If needed, we may suggest resources to help you and your family after leaving the hospital. In many cases, the doctor’s office has already discussed this with you and has arranged for home health care. It is unusual for patients undergoing hip arthroscopy to require much added assistance after the first two days, but certainly there are exceptions in some instances.

**Immediate Wound Care**

Your wound will have a sterile dressing placed at the time of surgery. Most of the time the dressing is left in place for three days. You can therefore take the dressing off on day three. There will be small paper strips that are adherent to your skin once the dressing is removed. These should stay in place until they fall off on their own. Most of the time this occurs within ten days to two weeks from surgery. The wound is typically dry and you are now able to shower and wet the wound without problems. You should not submerge the wound either in bath or pool until the strips fall off.

It is not unusual to experience a fair amount of bruising and discoloration that can extend down the thigh and leg. This is normal and will go away over a period of ten days to two weeks.

**Activity at Home**

Everyone’s progress is different after this surgery. Listed are guidelines to follow. Follow all specific instructions from your surgeon, nurse and physical therapists. The following guidelines may be of benefit:

The following are the basic guidelines and restrictions:

- Use your crutches as directed. They will provide stability for the hip and allow the soft tissues to heal and regain normal strength.
- No lifting or holding weight until given permission by the surgeon. No heavy housework such as vacuuming. Some housework can be done earlier, but in many cases, heavy work is limited for the first six weeks. At the six-week follow-up appointment, your surgeon may permit you to start lifting.
- Increase your activity only as your surgeon has directed. It may take three months to one year before you regain optimum function and strength of your leg and hip.
Driving

You should not drive until you have completely stopped using the postoperative narcotic medications. If there is any question, you should wait until you see the surgeon at your postoperative visit. Part of this restriction relates to your insurance company’s restrictions following surgery of a limb. In addition, you should have good control of your leg so that you can step effectively on the pedals if an emergency situation arises. In most instances, patients drive within 3 to 5 days of surgery.

Sexual Activity

You may resume sexual activity as soon as your comfortable. Feel free to discuss sexual activity with your surgeon, nurse or physical therapist.

Diet

Follow an eating plan to achieve and maintain a healthy body weight for the rest of your life. Maintaining a healthy weight will help avoid staining your new joint.

Eat a variety of foods to maintain a nutritionally balanced diet. This means including foods from all food groups on a daily basis. Wound healing depends on a well-balanced diet.

Constipation can occur as a side effect of pain medication and as a result of decreased activity after surgery. Eat high fiber foods such as fresh fruits/vegetables and whole grains to help prevent constipation. Drink six to eight glasses of water daily unless instructed otherwise.

Ask a dietitian your general nutrition questions. They may provide instructions for a special diet if recommended by your surgeon.

Pain Control

You may experience hip discomfort for several weeks following surgery. Medication will be prescribed for the short term that will include a narcotic medication such as codeine or hydrocodone. Use this medication as instructed to help you complete your exercises effectively and increase your activity. As soon as you can, decrease your prescribed pain medication use. Do not take aspirin or ibuprofen if you take an anti-coagulant. If you choose to use acetaminophen (Tylenol), take no more than 12 regular or eight extra-strength pills in a 24-hour period.

Wound Care

Your wounds have stitches that are deep under your skin and will not need to be removed. Most patients have two or three incisions that are less than ½ inch in length. The paper strips that are solidly attached to your skin should stay in place for about ten days.

No dressing is required unless your wound shows signs of drainage. If you are more comfortable with a dressing it is fine to cover it with a sterile dressing.

After the incisions appear completely healed, you can begin immersing your wound in water. Prior to that you may shower, but not take a bath.

Avoid prolonged sun exposure. Too much sun may cause permanent irregular pigmentation changes to the incisions for the first three months. Adequate sun protection with SPF greater than 60 should be used in the first three months.
Bathing

Forty-eight (48) hours after surgery, you may shower and wet the wounds. Pat the incisions dry after sponging it with water or after you shower. You should not submerge the wound either in bath or pool until the strips fall off.

When to contact the Surgeon

- Drainage or odor from the incision
- Fever (temperature above 100.4 degrees F or 38 degrees C for two days)
- Increased pain unrelieved with pain medications
- Sudden, severe hip pain or calf pain
- Increased redness around the incision(s)
- Increased swelling at the incision(s)
- A bulge that can be felt at the hip
- Leg or hip pain, tenderness or swelling
- Numbness or tingling of the leg
- Changes in color and temperature of the leg
- Change in motion ability

Follow-up Appointments

Your surgeon will have you return for a follow-up examination to be sure your hip has healed properly. This is usually within two weeks of your surgery. An appointment can be set for you at the time of your preoperative visit.

At the time of the appointment, x-rays may be obtained in some cases to determine the effectiveness of any bony work performed.

Following the initial appointment, you will need to be seen approximately 6 weeks postoperatively, then at 12 weeks postoperatively. If everything is going well at that point, you will be released to return to all activities.

Return to Activities

Return to Work

The decision to return to work is made depending on your job requirements. In most occupations that involve office and/or computer work, you may be able to return within a few days. The return at this point will not be normal and you may not be able to work all day, but you will certainly be able to be productive. Complete, unrestricted abilities with regards to office work will occur by about one week to ten days.

If your job requires significant manual labor and lifting, the return will not occur completely until at least three months following surgery. Even after the three months, there may be

The phone number for the Southern California Orthopedic Institute is (818) 901-6600.
significant restrictions if you are still experiencing problems.

Return to Sports

The first six weeks following surgery should be reserved for returning your range of motion under the guidance of a physical therapist. The use of a stationary bicycle is appropriate in the first few days and will be encouraged by your physical therapist, also. Return to light weightlifting and swimming should be delayed until one week postoperatively since your wound must heal. Increasing activities including elliptical training and more active swimming are instituted by about six to eight weeks.

Complete unrestricted sports and lifting activities are delayed until three months postoperatively. This includes sports such as soccer, football, tennis, waterskiing, etc. Essentially any sports requiring higher impact to the hip should be delayed until this time.

What are the Results of Hip Arthroscopy?

Patients without arthritis and who have acetabular labral tears or loose bodies, often have excellent results. It has been reported that some patients do not improve after excision of diagnosed labral tears or loose bodies. This most commonly occurs in the case of significant, coexistent degenerative arthritis in the hip joint. Patients with FAI also can have associated arthritis in the joint that may preclude a good outcome. In published studies of patients following hip arthroscopy, there are good results in greater than 90% of the patients with no pre-existing arthritis. In cases where there is arthritis that is seen on x-rays, there can be failure in up to 40% of the cases. Often, the failures occur rather quickly after the hip arthroscopy (as early as 3 months later).

You should discuss your individual case with your surgeon, as there are many factors that impact your outcome.
About Your Surgeon

Carlos A. Guanche, MD

Dr. Carlos Guanche is a world-renown expert in hip and shoulder arthroscopy. In the 17 years he has been in practice he has treated thousands of patients, many whose professional lives depend on his skilled hands to bring them back from debilitating injury to center stage - and court. Faced with career-threatening conditions, professional athletes and world famous entertainers have entrusted their well-being to Dr. Guanche.

He has devoted his career to his patients by constantly striving to innovate, and make procedures less invasive, with smaller incisions, less pain, and shorter down-time. He is committed to advancing his field of specialty, and has two orthopaedic device patents to his name. He has trained hundreds of medical students, dozens of residents, and over thirty fellows in sports medicine and arthroscopy procedures. He actively teaches practicing physicians as well, via seminars, live surgery webcasts, and cadaver courses. He is a respected voice in orthopedics, serving as instructional course director at the prestigious Orthopaedic Learning Center, as well as the American Academy of Orthopaedic Surgery meetings. In addition, he is regularly invited to speak in Germany, Spain, Columbia, Norway, Slovenia, and Brazil at their orthopaedic societies. He has recently published a textbook on hip arthroscopy titled “Hip and Pelvis Injuries in Sports Medicine”, and has written more than 20 orthopaedic textbook chapters and 40 peer-reviewed journal articles. He serves as a research and development consultant to two of the world's largest orthopaedic device and equipment companies. He is one of only a small group of surgeons in the country who perform reverse total shoulders. In short, Dr. Guanche is a uniquely qualified surgeon with outstanding academic and clinical achievements, whose surgical excellence is complemented by his warm and down-to earth demeanor.

Dr. Guanche grew up in South Florida and graduated Magna Cum laude from the University of Miami. He went on to earn his Medical Degree from the University of Miami, after which he completed his orthopedic surgery residency at the Albert Einstein Medical Center in Philadelphia. He completed fellowship training in Sports Medicine and Shoulder surgery at the Minneapolis Sports Medicine Center in 1993.

Following his training, he was appointed to the teaching faculty at Louisiana State University. During his five years at LSU, he served as Associate Professor of Orthopedic Surgery and was responsible for the daily teaching of residents and medical students. He was the director of the Sports Medicine Division at LSU and was head team physician for the University of New Orleans basketball team (NCAA Division I), New Orleans Zephyrs (AAA baseball) and the New Orleans Brass (East Coast Hockey League). In addition, he was active in research studies, including a highly acclaimed study dealing with proprioception of the shoulder.

In 1998 he relocated to Minneapolis where he joined the Minneapolis Sports Medicine Center. He was appointed to the faculty of the University of Minnesota as Adjunct Associate Professor of Orthopaedic Surgery. At the Center, he trained fellows and residents in shoulder reconstruction and sports medicine arthroscopic techniques and was Clinical Coordinator for Basic Science.
Research. He was the principal investigator in NFL-funded research grants, including one designed to analyze the influence of Growth Factors in the healing of rotator cuff tears. In his position at the Center, he was Associate Team physician for the Minnesota Vikings (NFL) and was the upper extremity consultant to the Minnesota Wild (NHL), the Timberwolves (NBA) and the Lynx (WNBA). In addition, he was a consultant to the Minnesota State High School Football League.

Dr. Guanche is one of a select group of surgeons with extensive experience in hip arthroscopy. He is one of few physicians chosen to be a Master Instructor for international courses on hip arthroscopy. He regularly is consulted by and performs surgery on professional and collegiate athletes as well as entertainers with hip injuries. He also maintains a very active practice in the treatment of shoulder injuries including labral repairs, rotator cuff repairs and the management of arthritis. He has an extensive and unparalleled experience in the management of shoulder arthritis including the development of a minimally-invasive shoulder replacement technique.

A diplomate of the American Board of Orthopaedic Surgery, Dr. Guanche is a member of the American Orthopaedic Society for Sports Medicine, the Arthroscopy Association of North American and the American Shoulder and Elbow Society. He is additionally qualified by a Subspecialty Certificate in Orthopaedic Sports Medicine.

Always innovative, Dr. Guanche has two patents to his credit. One device allows for the specific measurement of shoulder laxity, while the other improves the ability to perform arthroscopic shoulder reconstructions. He is currently working on another for a minimally-invasive shoulder replacement prosthesis. He and his wife Anna and their two children live in Calabasas. When not distracted with his inventions, Dr. Guanche is active in running (including two marathons), golf, traveling, wines and enjoying time with his family.
Word List

**Acetabulum** – The cup side of the hip joint

**Active range of motion** – Joint movement occurring with active muscle contraction.

**Anesthesia** – Partial or complete loss of sensation or consciousness

**Anesthesiologist** – A physician who specializes in administering anesthesia

**Antibiotic** – A medication that prevents growth of or kills bacteria.

**Anti-embolism** – To help prevent a blood clot

**Arthritis** – The inflammation of a joint with loss of the cartilage or damage to the joint’s surface.

**Debridement** – Removal of tissue

**Femur** – The thigh bone

**Impingement** – A mechanical irritation that occurs as a result of one bone hitting another.

**Intravenous** – Into a vein.

**Labrum** – The rim of tissue around the edge of the acetabulum

**Passive range of motion** – Joint movement without muscle contraction.

**Rehabilitation** – Treatment and education that leads to regaining function.
Treatments Available at The Hip Arthroscopy Center of Southern California Orthopedic Institute

- Arthroscopic
  - Labral Repairs
  - Labral Debridements
  - Removal of Femoral Impingement Osteophytes
  - Pincer Impingement removal

WHO WE ARE

Southern California Orthopedic Institute (SCOI) is one of the largest private orthopedic practices on the West Coast, essentially the private-practice equivalent of a university orthopedic department. SCOI is a full-service orthopedic center providing high-quality care by the leading physicians in their respective fields of expertise. In fact, SCOI doctors are widely sought out with patients from many countries visiting its offices for consultation and treatment. That leadership role is seen throughout the world in the clinical research completed by SCOI and in its education of medical professionals on orthopedic diseases and disorders. The SCOI Fellowship Program is one of the most highly pursued in sports medicine education for the broad surgical experience provided.

Southern California Orthopedic Institute has, along with its main headquarters in Van Nuys, four satellite offices in the Los Angeles area, as well as an office in Bakersfield. For more information on the practice and its physicians, visit www.scoi.com.

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