

DMC® Orthopaedics and Sports Medicine



— A Patient's Guide to —
HIP ARTHROSCOPY

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Welcome

At DMC Orthopaedics and Sports Medicine we understand that hip pain and dysfunction can severely impair your quality of life. Our primary objective is to deliver world-class care for your hip problem in a highly personalized manner. With our wide breadth of clinical and surgical expertise and comprehensive team approach, we are confident that we can find a solution to help you overcome your pain and achieve a higher level of physical function.

We specialize in the treatment of pre-arthritis hip pain. Advances in technology and innovations in surgical treatments have led to an evolution in the way complex hip problems are treated.

We look forward to applying our knowledge and using every available tool at our disposal to customize a treatment to suit your individual hip needs. Thank you for allowing us to participate in your care.

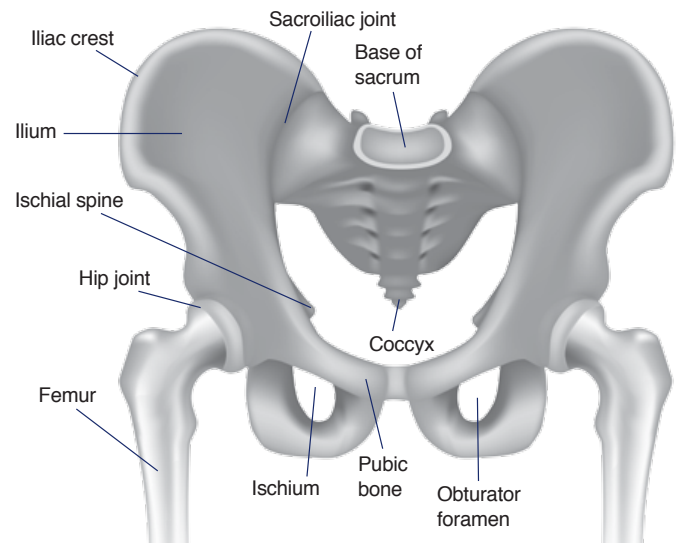
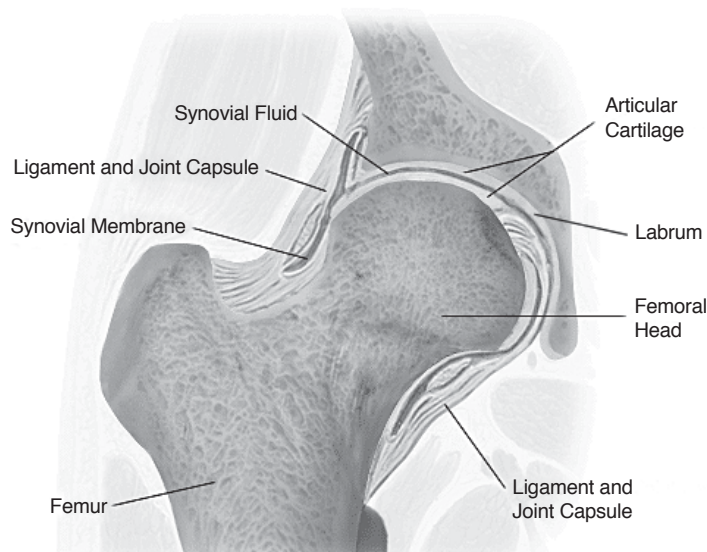


Orthopedic Surgery

DIANA R. SILAS, DO

Dr. Silas believes in looking at the whole body and a detailed patient history to assess injury and come up with a customized plan. The overall structure of the patient is crucial to their function. She realizes every patient presents a different challenge and no two injuries are exactly the same in every case. She loves being able to educate her patients and develop an individualized treatment plan right along side them. Her practice is centered around joint preserving procedures and treatments that can prevent or extend the need for total joint surgery.

Dr. Silas was born and raised in Metro Detroit and has a big heart for keeping her community active. When Dr. Silas is not seeing patients or in the operating room, she enjoys spending time with her family, traveling and fitness. She loves being active both in the gym and outdoors. As a former collegiate athlete, sports have always been a very big part of her non-work life as well.



The Hip

The hip joint is formed by a “ball” (femoral head) and “socket” (acetabulum), which join together to form a mobile joint. The bones are covered in cartilage to help absorb stress from weight bearing. Ligaments, tendons and muscles work together to keep the joint stable while the body performs different activities. Injuries to any layer of the hip can cause pain and compromise your physical function.

PROBLEMS IN THE HIP

Acetabular Dysplasia: As the hip develops, the socket is too shallow and does not allow the ball to fit firmly in the joint. Reduced coverage over the femur may cause the hip to be unstable and/or painful. Increased stress may cause the joint to wear down (become arthritic) earlier than normal.

Alignment Abnormalities: Malalignment of the upper part of the femur may place abnormal and excessive stresses on the cartilage within the hip socket, causing premature damage. This may also cause the surrounding muscles to become overworked.

Athletic Pubalgia/“Sports Hernia”: A soft tissue syndrome involving irritation and imbalance of pelvic or core muscles at the musculotendinous junction (the site where the muscle and tendon meet or where the tendon attaches to the bone). Pain in the central pelvis or groin may be experienced as a result of inflammation and/or tearing of the muscle, as well as irritation of surrounding nerves.

Avascular Necrosis (AVN): When the blood supply that feeds the bone is disrupted, it may cause the bone to die. Some causes of AVN of the femoral head include a traumatic injury (dislocation/fracture), Legg-Calve-Perthes, Slipped Capital Femoral Epiphysis, and chronic steroid or alcohol use.

Cartilage Defects: The normal wear and tear of life may eventually damage cartilage, the material that covers the surface of bones in healthy joints. When cartilage softens or tears, it may cause pain, reduce available motion within the joint, and limit function.

Femoroacetabular Impingement (FAI): The ball and/or socket of the hip can be irregularly shaped, which may cause anatomic conflict within the joint. Repetitive friction may lead to damage of soft tissue structures within the hip and/or cartilage.

Labral Tear: The labrum is a cartilage ring around the socket that seals the joint and provides stability. Separation, or tearing, of the labrum may cause pain, stiffness, catching or locking within the joint.

Legg-Calve-Perthes Disease: A childhood condition that occurs when blood supply is temporarily interrupted to the ball (femoral head) of the hip joint. Without sufficient blood flow, the bone begins to die and deform.

Loose Bodies: Pieces of torn cartilage or bone may float around in the hip joint and cause locking or pain when they lodge between the ball and socket.

Slipped Capital Femoral Epiphysis: An adolescent hip condition that affects the growth center of the hip (the capital femoral epiphysis). The upper part of the growth plate slips backwards on the top of the femur and if left untreated can lead to serious hip dysfunction and pain later in life.

Snapping Hip: This syndrome is commonly caused by tendons snapping over bones in the hip. The iliotibial band that travels from the pelvis to the knee can snap at the outside of the hip, irritating the trochanteric bursa and muscles. Snapping can also occur at the front of the hip when there is inflammation surrounding the iliopsoas (hip flexor) tendon.

Soft Tissue Abnormalities: Soft tissue injuries will generally resolve without surgical intervention, but when pain does not resolve or if the injury becomes worse, surgical inspection and repair may be necessary. Often this occurs when the injury is located in the tendon of the muscle, near where it attaches to the bone. Although rare, muscles that most commonly need to be repaired include the gluteus medius, proximal hamstring, and adductor.

Synovitis: The synovium, the lining of the hip joint, can become inflamed. When this occurs it may cause pain and reduce mobility in the joint.

Trochanteric Bursitis: Sac-like pockets composed of fluid and connective tissue are found around many joints in the body. These bursae can form into scar bands later in life. They act to reduce friction between the bone and soft tissues around the hip joint. Bursitis may occur as a result of age, repetitive activities, trauma, or structural abnormalities.

HIP TREATMENT

Hip preservation surgery encompasses a variety of techniques. These include cartilage and soft tissue repairs or reconstructions, joint reshaping, and structural reorientation procedures intended to disperse weight-bearing forces evenly throughout the joint to keep the hip healthy. Common procedures include the following:

Hip Arthroscopy: A minimally-invasive surgical tool used to look inside the hip joint and facilitate access to perform surgical techniques that address symptomatic concerns. Small incisions are used to place an arthroscope (a camera) and surgical instruments inside your hip. Arthroscopy is most commonly used to guide the following techniques:

Arthroscopic procedures cannot fully correct large structural abnormalities. In some cases they may be performed to improve painful cartilage, labral, or synovial injuries, as part of a staged, complex hip surgery.

FAI Decompression: A motorized burr is used to remove regions of overgrown bone that are restricting motion. Restoration of normal joint shape can provide improved mobility and function.

Labral Repair/Debridement: Symptomatic labral tears can be addressed in multiple ways during surgery. Based on the characteristics of the tear, your surgeon will decide if the labrum will be debrided (remove the damaged tissue only), repaired, or replaced with graft (cadaver) tissue.

Synovectomy: Inflamed tissue that does not resolve with conservative treatment can be resected to restore motion and improve pain.

Trochanteric Bursectomy: Arthroscopic instruments are placed in the peritrochanteric space (outside of the hip) and the inflamed bursa and surrounding bands of scar tissue are removed.

Tenotomy: Painful snapping that does not resolve with conservative treatment can be addressed with a partial release, or lengthening, of the tendon. This procedure is most often performed for internal and external snapping hip syndrome by lengthening the iliopsoas (internal) or iliotibial (IT) band (external).

Cartilage Restoration: When the cartilage is not healthy, various techniques can be used to preserve or restore the “shock absorber” of the joint. These techniques may include microfracture, where small holes are drilled into the bone marrow to release cells that can form a scar cartilage “cap” over defects. Microfracture is generally used for small defects when the remainder of the joint is healthy. When widespread cartilage damage is present or unstable flaps of cartilage are causing pain, simple debridement or tissue “smoothing” is performed.

Muscle Repairs: Occasionally tears in muscles/tendons (hamstring, gluteus medius, adductor) are so severe that they do not heal with conservative treatment and require surgery. Some of these repairs can be completed using arthroscopic techniques, but for larger or more chronic tears, an open procedure may be necessary. To repair the muscular/tendinous tissue, sutures are anchored into the bone and wrapped into the muscle/tendon to secure the torn tissue back to its natural position.

Risks Associated with Hip Surgery

Hearing about the risks of surgery can be scary. Please rest assured that we exercise every possible precaution to make sure that your surgical risks are minimized. If you have specific questions regarding the risks of your surgery, please discuss them with your medical team.

INFECTION

As with any surgery, there is a risk of infection. Inspect the incisions and the area around your incisions daily and notify your surgeon if you notice any of the following signs and symptoms:

- Increased redness, swelling or pain at the incision site or surrounding areas.
- Increase in drainage or yellow/green drainage.
- An odor.
- A fever greater than 101° F (or surrounding skin that is increasingly hot to touch).

BLOOD CLOTS

Restricted mobility following surgery may cause a decrease in blood flow and allow blood to coagulate in the veins of your legs, creating a blood clot. It is important to routinely perform ankle pumps to minimize the risk. Please let your surgeon know before surgery if you or a family member has a history of blood clots or clotting disorders, if you take oral contraceptives (birth control pills) or if you have a significant history of tobacco use.

Signs of blood clots: Swelling in the thigh, calf, or ankle that does not go down (especially overnight). Increased pain, tenderness, redness or warmth in calf, or calf pain with ankle pumps. If you notice these symptoms call your physician, or go to the nearest emergency department immediately.

BLEEDING

Although arthroscopic hip surgery is minimally invasive, bleeding during surgery is common. Many patients experience some bloody drainage from their arthroscopic portals that may break through their dressings. This should not prompt concern. Dressings may be reinforced as needed until drainage subsides. Please call your surgeon if you notice heavy bleeding that soaks through multiple dressings.

NERVE DAMAGE

Numbness in the area around your incisions is common. Small nerve branches that produce sensation may be stretched with surgery and temporarily cause the area to lose feeling. Injuries to the major nerves that control leg function are, fortunately, very rare.

RISKS OF ANESTHESIA

Risks of anesthesia will be discussed separately by your anesthesia provider.

How Do I Prepare for Surgery?

PRE-OPERATIVE APPOINTMENTS

Prior to your surgery date, you will have clinic appointments with the Hip Preservation Team. During this time, your potential surgical plan will be reviewed with you. We encourage you to ask questions to ensure that you fully understand your injury, surgery, and the extent of post-operative care.

You will also have a pre-operative rehabilitation appointment with a member of the Hip Rehabilitation Team, who will review crutch/walker ambulation, mobility tasks, and immediate post-operative exercises for you to perform. The Hip Rehabilitation Team member will also review initial movement and weight-bearing restrictions. Please ask any questions you have about functional tasks to improve your ability to care for yourself after surgery.

QUIT TOBACCO USE

Research has shown the use of any tobacco product inhibits bone healing and may delay or prevent your bones from healing properly after surgery. It is strongly recommended that you quit the use of tobacco products at least 2 weeks before your surgery. If you would like help or advice, please call the Michigan Tobacco Quitline at **1-800-Quit-Now** (1-800-784-8669).

STOP NSAIDS

7 days prior to surgery you must STOP taking any non-steroidal anti-inflammatories (NSAIDs) such as ibuprofen (Advil, Motrin), Naproxen (Naprosyn, Aleve) or Indomethacin (Indocin). Please read all over-the-counter medications before taking them, as some contain NSAIDs (ie; cold medicines).

Note: your surgeon may provide you with alternate individualized instructions.

24 Hours Before Surgery

After 3:00 pm the day before your surgery, you will receive a call from DMC informing you of the arrival time for your surgery and final instructions. If you have questions after you receive the call, please call **248-937-3402**.

Do not eat or drink anything after midnight the night before surgery. This includes (but is not limited to) candy, gum, mints, water, coffee and juice. Failure to comply with these instructions may lead to a delay or cancellation of your surgery.

- If you need to take essential medications on the morning of your surgery, you may take your pills with a small sip of water.
- You may brush your teeth the morning of surgery, just do not swallow the water.

WHAT SHOULD YOU BRING FOR YOUR SURGERY?

Please be sure to bring your Driver's License/Photo ID, and medical insurance cards. If you have crutches, please bring them with you. If you do not have them, be sure to tell the nurse when you arrive, and they will be provided for you. Be sure to wear loose clothing that you will be comfortable in after your surgery.

Do not bring make-up, piercings, jewelry, money, credit cards, or any other personal valuables. We are not responsible for lost or stolen property.

The Day of Surgery

When you arrive at the surgery center you will be taken to the pre-operative area where your surgeon(s) and anesthesiology team will meet with you to discuss the surgical plan. Nurses will start an IV and may give you medication to help you relax. You will be wheeled on your bed to the operating room, where the anesthesiologist will administer general anesthesia. You will constantly be monitored to evaluate your breathing and heart rate. When the surgery is complete, you will be moved to the post-anesthesia care unit (PACU). The nurses and anesthesiology team will make sure you are comfortable. Your family members will be brought in to visit you when you wake up. When you are awake and alert with controlled pain, you will be discharged to go home.

CARING FOR YOURSELF AT HOME

Once you are home, there will be some necessary precautions due to limitations from your surgery. Below are some suggestions that will help make your transition to home as simple and safe as possible.

DO'S AND DON'TS

- ✓ **Do** sit in a stable, high-seated chair with two armrests so that you can push off from the chair. If the seat is too low, place a pillow on the seat of the chair.
- ✓ **Do** use caution with household pets until you are in the house safely and seated.
- ✓ **Do** remove scatter rugs/hallway runners, and tape down edges of large area rugs.
- ✓ **Do** keep electrical cords and phone cords out of the way.
- ✓ **Do** keep your home well lit, including nightlights, a bedside light, and entry way lights.
- ✓ **Do** be very careful of water on the bathroom floor. It is a good idea to have a chair for sitting in the shower the first few weeks after your surgery.
- ✓ **Do** practice getting around your house using crutches prior to your surgery. (REMEMBER TO PRACTICE GOING UP AND DOWN STAIRS!)
- ✗ **Do not** bend your hip greater than 90 degrees.
- ✗ **Do not** lean forward more than 90 degrees (this includes reaching down to pick objects off of the floor or tying your shoes).
- ✗ **Do not** sit in low or overstuffed chairs or sofas.

The Day of Surgery continued...

Pain Control: You will be given narcotic pain medication to take home with you. Use these medications as instructed when needed for pain. This pain medication may have Tylenol in it.

Do not take additional Tylenol without first discussing with your surgeon. Pain medication may cause constipation, so remember to drink plenty of fluids, eat a high fiber diet and, if needed, use stool softening medications as directed.

You may be given an anti-inflammatory medication (Naprosyn, Indocin, Ibuprofen) to take for 3-4 weeks after surgery to prevent bony deposits. **Do not take any other anti-inflammatories in addition to this medication.**

If you are unable to take oral pain medication or have some other extenuating circumstance, this adjunctive pain treatment may be used:

Regional anesthesia involves placing long acting numbing medicine into the nerve that provides sensation to the surgical area. This can substantially reduce post-operative pain and facilitate early rehabilitation. Please discuss options for regional anesthesia with your surgeon to determine which is right for you. If you receive a femoral nerve block or spinal anesthesia, please exercise extreme caution with crutches to prevent falling, as your injured extremity may feel numb and/or weak and may not support the weight of your body.

Other ways to help reduce your pain include motion (stationary bike, CPM machine), getting up and moving around, changing your position, and icing.

Hip Dressing/Incision Care: Your dressing will be removed at your first outpatient rehabilitation the day after surgery. Either a new bandage or band-aids will be applied to cover your stitches. Do not apply any lotion, cream or antibiotic ointment to your incision. Your stitches will be removed approximately 7-10 days following surgery.

Sleeping: For the first 7 nights after surgery, you may be required to sleep with a night splint to prevent undesired positions while you sleep. You will wake up in recovery with this on, and the nursing staff will show you and your family members how to apply it. After the first few nights, you may sleep in any position that is comfortable to you.

Bathing: 2-3 days after surgery you may shower, but you may not soak or submerge your incision for 2 weeks after surgery. In the first few days, you may take a sponge bath in 2-3 inches of water without getting your incision wet.

School/Work: For a few weeks following surgery, sitting and standing for prolonged periods of time will be difficult for you. If you are currently a student, you will miss approximately 2 weeks of school then gradually progress back in to full days.

Returning back to work greatly varies on the demands of your job. Work restrictions range anywhere from 1-4 months.

Movement Precautions: Remember you are not able to bend your hip greater than 90 degrees for the first 7 days after surgery. To avoid this, sit in higher chairs and avoid low or overstuffed chairs. Do not lean forward to pick something up off the ground or tie your shoe/ put socks on. Also, avoid crossing your legs or feet and rotating your knee or foot excessively inward or outward.

You are encouraged to lay on your stomach for a minimum of 2-4 hours a day. You are discouraged from sitting for prolonged periods of time (i.e., arm chair, recliner.)

Icing: Until you have no pain, soreness, warmth or swelling, you should be icing frequently (at least 4 times) throughout the day. Avoid chemical ice packs, as they may cause frost-bite and skin irritation. Crushed ice in a well-sealed bag or bags of frozen peas work well.

Post-operative Rehabilitation Program

You will begin formal rehabilitation at our outpatient facilities the day after surgery. The rehabilitation program will be designed for you and your specific surgery. In the first few days after surgery, you will have restrictions on the amount of weight that you can bear on the surgical leg and the amount you are able to move your hip. All restrictions will be reviewed with you at your first rehabilitation appointment. You will attend therapy for approximately 5-6 months, or until you have returned to all activities you would like to do with approval from your surgeon.

Maximizing recovery after hip surgery requires several things: protection of your healing tissue, a gradual return of range of motion and strength, resolution of swelling, and restoration of functional abilities. Your recovery program must be initiated **IMMEDIATELY AFTER SURGERY** unless you have been otherwise directed by your surgeon. A physical therapist/athletic trainer will review your program with you at your pre-operative appointment, and again at your first outpatient post-operative rehabilitation appointment. It is best to have thoroughly reviewed and practiced this program PRIOR to your surgery. It is very important that you complete your program with perseverance and consistency in order to optimize your recovery.

The following exercises are to be performed 3 to 4 times per day immediately following your surgery. You may feel some discomfort while performing some of the exercises, but as you perform the exercises your pain should lessen. **If you are not sure you are performing the exercises properly, or if you are experiencing increased pain during or immediately after you do them, stop the exercises until you consult with your physical therapist or athletic trainer.**

Exercises

Ankle Pumps

Moving the foot helps loosen the calf muscles, helps control swelling, and improves circulation.

Pull toes back towards hip, and then push down away from you (as in using the gas or brake pedal while driving). Use a 1 count pace in each direction.

Perform 30 times, hourly.

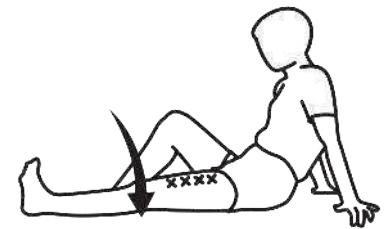


Quadricep Isometrics/Quad Sets (Front of Thigh)

With knee as straight as possible, contract the quad as if trying to straighten out your leg. Hold 5-10 sec; perform 10 times.

These cues may help you isolate the quads better:

- “Think-see-feel” kneecap being pulled up towards your hip as the quad tightens.
- Feel your quad as you squeeze to see if it is getting tight.
- Attempt to press the back of your knee into the floor.



Glute Sets

While lying down on your back with both legs straight, contract both gluteus muscles (the large buttocks muscle). Use your hands to feel the muscles tightening under them.

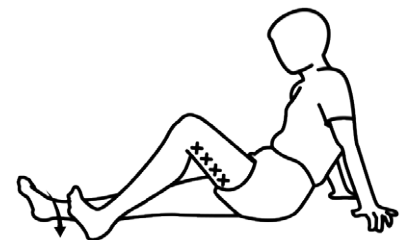
Hold 5-10 seconds; perform 10 times.



Hamstring Isometrics/Heel Digs

Contract your hamstring by pushing your heel downward and pulling back as if trying to bend knee. You can do this while sitting up or laying flat on your back. Hold 5-10 sec; perform 10 times, increasing by 5's as tolerated until you are able to perform 30.

Repeat exercise 3-4 times per day.



AQUATIC THERAPY

After approximately 2 weeks, as your range of motion and strength continue to improve, it may be beneficial to perform exercises in a pool to help improve your function. The water creates less stress on your hip as you begin to practice a normal walking pattern. When it is appropriate, your physical therapist/athletic trainer will incorporate a pool program along with your land-based therapy program.

Crutch Training

Immediately after surgery you will be allowed touchdown weight bearing, allowing about 20 lbs of weight on your surgical leg (walk as if you were walking on egg shells). You should be keeping your knee straight while you walk. **Your knee should be straight, and your foot placed flat on the floor.**

Walking with Crutches:

- Put the crutches forward about one step's length.
- Put the surgical leg forward, level with the crutch tips.
- Touch the front of the foot of the surgical leg to the floor. Do not bear weight into the foot, but bear weight of the body on your crutches.

Going up stairs with crutches:

- Move to the front edge of the stairs.
- Press down on the crutches and advance the uninvolved leg to the step above.
- Stand erect and advance the surgical leg and crutches to the step.
- Repeat this process for the remainder of the steps.

Going down stairs with crutches:

- Move to the front edge of the stairs.
- Lower the crutches and your surgical leg down to the step.
- Press down on the crutches and advance the uninvolved leg.
- Repeat this process for the remainder of the steps.

If you do not feel confident and comfortable going up/down stairs with crutches, you can sit on use your arms to lift/lower yourself from one step to the next.



Follow Up Appointments

- **1 day** after your surgery you will attend your first outpatient rehabilitation appointment.
- **7-10 days** after your surgery you will follow up with your surgeon. At this appointment, they will take x-rays of your hip and discuss your surgery and recovery.
- **3-4 weeks** after your surgery you will follow up again with your surgeon. She will discuss with you your recovery during the first few weeks.
- **6-8 weeks** after your surgery you will follow up to assess your progress and outline a functional return to your previous level of activities.
- **3-4 months** after your surgery you will return to be evaluated by your surgeon, to ensure you have no concerns, and are on your way to returning to the activities you enjoy.
- **6-12 months**, If you are physically active and participating in sports or regular exercise, you are encouraged to follow up with our Hip Rehabilitation Team monthly for continued maintenance and functional progression.

When to Call Us

Please call our office **248-489-4410** or **248-937-4947** if you experience any of the following:

- Signs of infection (fever, chills, pus/increased drainage from the incision, redness, abnormal swelling).
- Increasing numbness, weakness or tingling in your legs.
- Change in bowel or bladder control.
- Increased pain that isn't responsive to rest, ice, prescribed medications and physical therapy.
- Serious slips and falls.

Helpful Links/Resources

www.dmcmedicalgroup.com

www.americanhipinstitute.org

www.activerelease.com

www.aaos.org

www.aahks.org

www.hipsoc.org

www.isha.net

www.nlm.nih.gov/medlineplus/hipinjuriesanddisorders.html

Important Addresses and Phone Numbers

HIP PRESERVATION TEAM:



Diana R Silas, DO

Medical Specialties: Arthroscopy and Minimally Invasive Treatments, Hip/Knee Shoulder/Elbow Arthroscopy, Ligament Repair and Reconstruction, Joint Preservation, Biologic Joint Reconstruction, Total Shoulder and Reverse Shoulder Replacement, Orthopedic Trauma/Injuries

LOCATIONS:



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