



Louisville Orthopaedic Clinic



**LOC Welcomes the
Addition of the Center for
Orthopedic Spine & Pain**

Total Hip Replacement:
Answering Your Questions about the Anterior Approach
RICHARD "ALEX" SWEET II, MD

Cortisone vs. PRP Injections
MELISSA PARSHALL, PA-C



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Greetings from

THE ADMINISTRATOR OF LOUISVILLE ORTHOPAEDIC CLINIC



It is with great pleasure we bring you our eighth edition of the Louisville Orthopaedic Clinic Magazine. This publication provides useful information to help you understand a variety of common orthopaedic ailments and advancements in orthopaedic medicine. The Louisville Orthopaedic Clinic and Sports Rehabilitation Center's mission is to provide comprehensive orthopaedic care, in a caring and friendly atmosphere. We strive to "Get You Back in the Game."

Since the practice began in 1974, we have continued to advance to better meet the needs of the community. Our orthopaedic surgeons work in collaboration with certified physician assistants and nurse practitioners to provide timely appointments and enhanced treatment. Our surgeons are board certified in orthopaedic surgery and have completed fellowship training in custom total joint replacement; arthroscopic procedures of the knee, shoulder and ankle; surgery of the spine; foot and ankle disorders and sports medicine. We offer onsite conveniences of an open MRI, Durable Medical Equipment and Licensed Physical Therapists.

The opening of our New Albany, Indiana office is the first true expansion of the practice. We saw a need to serve the community while maintaining our independence. We look forward to serving Southern Indiana.

Our patients experience the latest technology and concepts available in healthcare. Louisville Orthopaedic Clinic continues to progress through technology with the implementation of an electronic health record. Digital x-ray and registered technicians ensure the highest quality images possible to aid in the diagnosis and treatment of our patients.

Our redesigned website at www.louortho.com offers a wide range of features to include general office information, detailed educational background on physicians, educational resources to better understand your medical condition and a patient portal. Our interactive patient portal allows patients to communicate with our office via the internet or mobile device. The patient portal is a secure method of exchanging information between the patient and facility. Patients can register, update information, request medical records, complete online payments, request refills on medication and send non-urgent medical requests. Our physicians participate in research studies; contribute to medical journals and publications, all accessible on our website.

As part of our sports medicine program, we are team physicians for Ballard, North Oldham, Sacred Heart, North Bullitt and St. Xavier High Schools along with Spaulding University providing sports physicals and urgent care. We are dedicated to providing education and treatment to the community.

We look forward to serving you at one of our three conveniently located offices in St. Matthews, Baptist Eastpoint and New Albany, Indiana.

The physicians and staff of LOC thank you for the opportunity you have given us to serve you and look forward to meeting your orthopaedic needs.

Deborah Martin, MBA-HCM
Practice Administrator

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LOC Welcomes the Addition of the Center for Orthopedic Spine & Pain

LOC is proud to introduce the regions only orthopedic spine and pain clinic, The Center for Orthopedic Spine + Pain (COSP). We welcome Dr. Aaron Compton to our practice as a board certified, fellowship trained interventional pain specialist. Combined with the expertise of our orthopedic specialists, we are now able to offer truly comprehensive care for all your musculoskeletal needs. Dr. Compton complements our current services providing non-operative care of orthopedic pain.

Venu Vemuri, DO, Spine Specialist, came up with the vision for the COSP after realizing a need for streamlined, continuity of care, for patients seeking relief via surgical and non-surgical treatment options. As a traditional orthopedic practice, our physicians regularly encounter patients wishing to avoid surgery or delay surgery for a multitude of reasons. In some instances, combining surgical and non-surgical interventions is the most appropriate option. By bringing on experienced Pain Management Specialist, Aaron Compton, MD, we're able to present all available treatment options. Armed with this information, the patient and provider can come up with a plan that best suits their needs and lifestyle.

Communication, comfort, and convenience are key factors in the success of a patient's journey in finding relief. By opening the COSP, we're able to maintain a direct line of communication and access to patient records allowing our specialists to work with one another to develop a customized treatment approach. More than ever, our orthopedists are confident in the care their patients receive having hand-picked a Pain Management Specialist whose abilities and care



Venu Venmuri, DO



Aaron Compton, M.D.

philosophy line up with that of LOC. Having the ability to review and discuss imaging prior to and following epidurals, joint injections, nerve blocks, etc., allows for more precision, as well as aiding in the direction for any follow-up care. Greater precision and communication leads to superior outcomes.

We wanted to create a space in which not only the design, but the equipment and technology are on the leading edge of what's available today. Patients can expect a modern yet comfortable environment in which to receive their care. Each treatment room is equipped with touch screens displaying anatomical illustrations. These interactive visual displays allow for a deeper understanding of the condition and treatments being discussed. This educational tool helps the patient make a more confident and informed decision regarding their treatment. Their goal is to provide the latest treatments available, conservative and surgical, helping patients to achieve a pain free life while reducing the reliance on narcotic pain medication.

"I am excited to work with Dr. Compton who I personally recruited to the practice," says Dr. Vemuri. "I first met Dr. Compton when we were both working at Schneck Medical Center in Seymour Indiana. I was very impressed with his procedure skill as well as bedside manner. I could tell he had a passion for helping patients live pain free and without narcotics whenever possible. Now skip forward 6 years later, I am honored to share space with Dr. Compton in COSP's wonderful new home."





“Communication, comfort, and convenience are key factors in the success of a patient’s journey in finding relief.”





A Unique Approach to Pain Management

I've had an interest in the treatment of chronic pain since I was young, seeing the debilitating effects of chronic pain on close friends and family members. Before exploring the field of Pain Medicine, like others, I simply thought that once a patient's condition couldn't be "fixed," they must rely on taking pain pills forever. Fortunately, this is far from the truth.

While not all painful conditions can be cured or fixed, most of them can be treated in a manner to reduce pain significantly, and improve the patient's ability to live a normal life. I prescribe a multimodal treatment approach to chronic pain, which utilizes evidence-based practices to reduce pain and restore function. Strategies used in a multimodal treatment plan may include lifestyle modifications, physical therapy, behavioral therapy, minimally invasive procedures, non-narcotic

medications, among others. With this approach, a patient's reliance on opioid or narcotic pain medications is minimized. These medications are more-or-less a Band-Aid, without actually altering the pain process within the body. Now more than ever,

the dangers of these medications are evident when we see the local and national news coverage about the opioid crisis.



At your first consultation visit at The Center for Orthopedic Spine and Pain, we will perform a thorough review of your medical records, which often includes various labs, imaging studies, and other tests. We will then carefully listen to how your pain affects your day-to-day life, and perform a physical examination. In most cases, we are able to identify the source of your pain. If not, we may order additional tests, or seek the expertise of colleagues. We then formulate a multimodal treatment plan aiming to reduce your pain and restore your function. You will play a vital role in your recovery and your health.

In many cases, your multimodal treatment plan will include the option of minimally invasive procedures. Combined with the other elements of your treatment plan, these procedures can significantly accelerate your pain relief and functional restoration. Most of these procedures are very brief and without any incisions, allowing you to return home within a few hours. Conscious sedation is available to provide maximum comfort to patients.

AARON K. COMPTON, M.D.



Achieving Pain Relief with Radiofrequency Ablation

Chronic pain affects millions of Americans, resulting in a loss of function and enjoyment of life. In some circumstances, surgery is not always the answer, or may be considered high risk for patients with certain health issues. Fortunately, the understanding and treatment options for chronic pain conditions has significantly advanced in recent decades. At the Center for Orthopedic Spine & Pain, we offer several minimally invasive procedures that can provide significant pain relief for a variety of painful conditions. One such procedure we offer is radiofrequency ablation (RFA). RFA is a technique in which heat energy is directed through small needles to lesion or burn the nerves that are causing your pain. Once the nerves have been lesioned, they will no longer send the pain signal to the brain. Unlike other traditional injections, RFA does not require the use of any steroid or cortisone.

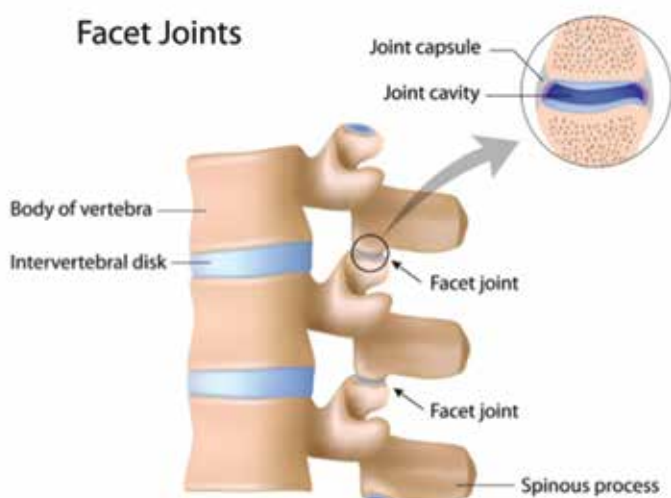


Fig. 1



Fig. 2

RFA is a technique that we commonly utilize for neck pain, back pain, knee pain, and a few other regions of the body. For neck and back pain, RFA addresses pain from the facet joints (Fig. 1). For knee pain, RFA addresses the genicular nerves (Fig. 2). Before deciding if RFA is appropriate for your pain condition, we will first extensively review your medical records (including imaging studies), and perform a thorough physical examination at an office visit. If your pain is suspected to be caused by a condition amenable to RFA, we will likely offer you this treatment option. Depending on your clinical presentation and your insurance, we typically begin by first performing a diagnostic “test” block. The test block is a simple injection of a local anesthetic or numbing medication to the nerves we are considering for RFA. This medication will temporarily stun the nerve for a few hours, which mimics the lesioning of RFA. If the temporary relief from the test injection provides substantial benefit, we will then schedule the RFA procedure.

For the majority of patients who undergo RFA, the average duration of relief is 6-8 months, though some patients receive benefit for 2+ years. If the pain returns later, this is a sign that the nerves are starting to regrow. If this is the case, RFA can easily be repeated when needed.

Most procedures we perform at the Center for Spine and Orthopedic Pain are performed using real-time x-ray guidance. This is true for both the test injections and RFA procedures. Intravenous sedation is also available, making it a comfortable experience. The procedure typically takes less than 30 minutes, and has very minimal recovery time.



NEVER Have Back Surgery?

I hear it all the time;
“I will ***never*** have back surgery”.

As a spine surgeon, I am humbled that anyone would let me operate on their back when so much is riding on the success of surgery. I respect the overwhelming apprehension over back surgery. People trust others and their opinion. When someone hears about a bad experience with back surgery, it forms a powerful influence. I try not to be offended when people tell me in my office; “I heard you should never have back surgery because it doesn't work”. If that were the case, I would never and should never operate on anyone! Might as well close up my practice and do something else. Right?



The reality is spine surgery can be life changing in a good way if the correct surgery is matched with the right condition. Research and experience has enlightened spine surgeons as to which surgeries work and which do not. I use this knowledge to filter through many patients with painful spinal problems finding treatments that work whether it be surgery or not. I may see 100 patients a week in the office and only recommend surgery to 10. In other words, 90% of patients in my clinic do not need surgery. Selectivity drives better results.

Another factor unique to the spine is that it isn't just one joint like a hip, knee, or shoulder. In fact, just the lumbar spine or the low back has 5 vertebrae connected together by 10 joints called facet joints as well as 5 discs. This complex structure was elegantly designed to protect the delicate spinal nerves AND allow movement through all those aforementioned joints. Unlike mammals, we humans do this standing up! It is part of what makes us humans. Unfortunately, gravity is not kind to the spine. Over time, the spongy discs and fluid joints wear causing spurs to develop. These spurs or overgrowth of the spine can narrow and pinch the nerves, ouch! If I operate on one of the five levels, there are 4 more which may go bad or cause problems down the road. My former partner Dr. Lehman used to tell his patients; "Spine surgery is like potato chips; you can't just have one!" Joking aside, spine surgery can feel like a failure if another level goes

bad sometime after surgery. The surgery didn't fail, the spine did. Sounds depressing but it shouldn't be. Again, not all these conditions will need an operation. They can often be treated with exercise only. Because there are multiple spine levels, there is no guarantee another level will cause problems down the road. It doesn't mean the surgery failed.

The good news is minimally invasive spine surgery decreases the rate of wear on the neighboring spine levels. By accessing the spine through small windows and minimal disruption of normal anatomy, we can preserve the adjacent levels thereby decreasing the need for further surgery. This has been proven in many studies and I have definitely noticed the difference in my own practice.

The bottom line is, you should only resort to surgery after exhausting all other treatments. Are you following an anti-inflammatory diet? Are you exercising? Are you doing the right exercises? Did you try physical therapy? Did you try shots? Medicine? If you tried everything and the pain is unbearable you should consider surgery. I often wait for patients to reach this conclusion on their own and tell me when they are ready. After all, it's your body. Once you have surgery I will do my best to give you back that quality of life you are missing. The greatest part of my job is hearing positive feedback from satisfied patients. The next time someone tells you "never have back surgery"; make your own judgement.



Getting His Feet Back on the Ground

After a dangerous fall, physical therapy allows Matt Isbell to walk again.

Matt Isbell hung by his fingertips to his second-story balcony, 18 feet above the ground. His grip was slipping, and his options were limited. He saw his tools and ladder beneath him – the ladder he had been standing on while he was pressure washing his antebellum home's exterior that late April day in 2017.

Matt “kept looking down, and didn’t think the ground was that far,” so he chose to let go. His right leg hit the first patio step. His femur shattered. He was rushed to UofL Hospital, where he was told he would have a long, difficult road to recovery. There was no guarantee that he would ever walk unassisted again. Matt was reluctant to seek rehabilitation treatment due to a bout with pneumonia from his hospital stay, until his youngest daughter, Rachel Hunt stepped in.

“Once I realized the severity of my dad’s injury, I thought it just screamed ‘rehab,’” Rachel said. She helped her dad understand that the bridge between hospital and home could be painlessly navigated with help, which is why they turned to the Sam Swope Care Center at Masonic Homes Kentucky.

Matt was aware of Masonic because he is a Mason himself. Once at the Sam Swope Care Center, Matt received treatment for his pneumonia and began physical therapy for his leg. Rachel remembered “there were some tough days, but the staff’s kindness and encouragement kept my dad going. The campus is also absolutely beautiful, so that really helped in getting my dad outside and moving.”

“I don’t know how you could have any better care than I had at Masonic,” said Matt, who describes himself as an extravert. “I enjoyed the comradery and companionship. All of those are things you need from people.” His daughter noticed the friendship between her father and his caregivers, too. “He didn’t just want to be a patient, he wanted to have a connection with each of them... They made it easy for him to do that.”

Within one week of his release from the Sam Swope Care Center, Matt was back outside on their tractor mowing their 17-acre lawn and tending to their small farm. Just a little more than a year after the fall, Matt and his wife, Barbara, their two daughters, sons-in-law and four grandchildren made a trip to Disney World in Orlando to celebrate Matt and Barbara’s 50th wedding anniversary.

“If he hadn’t have gone to rehab, there is no way he could have gotten back on his tractor, and there is absolutely no way that we would have been able to go to Disney,” said Rachel. “The injury could have been the end of his independence.”

Rachel estimated they spent 12 hours and 10 miles a day walking through the park. Incredibly, Matt walked without assistance, a limp or pain medications. “Here we are a year later and I don’t have any difficulty getting around,” he said. “I’m not like I was at 20 years old, but I’m doing great.”



The trip to Disney World showcased how well Matt has recovered from his dramatic fall just a little over a year ago. In fact, experiencing the Tomorrowland Astro Orbiter, a futuristic rocket attraction, with her father and son meant more to Rachel than she would have expected. To get into their seats on the ride during the fireworks one evening, they had to ascend stairs, bridge a crevice and lower themselves into the cockpit, built like a deep bathtub. “I turned around and my dad is finagling himself without any problems into his seat next to my son,” said Rachel.

“One of the best memories I’ll always have with my father is being in the Astro Orbiter during the fireworks on Valentine’s Day,” said Rachel. “There is no way I could have that memory if not for his care through rehab.”



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Lateral Lumbar Interbody Fusion: Revolutionizing Spine Surgery



Fig 1. LLIF cage shown placed where the disc was removed.

A new and exciting technique to treat spinal conditions is now available at LOC. Lateral lumbar interbody fusion (LLIF) is a minimally invasive spine surgery to “open up” the spinal canal when the nerves are being squeezed causing pain. An added benefit, LLIF offers simultaneous rigid support of the spine until fusion occurs naturally over time. Traditional spine surgery has focused on directly removing bone, ligaments, discs, etc. to free up tight painful nerves. The bony removal often destabilizes the spine requiring a fusion. Potential complications with this technique include scarring around the nerves (arachnoiditis), dural tear, and large blood loss. With LLIF, these risks are eliminated.

By approaching the spine from the side of the body, special retractors and instruments can be used to remove the disc and place bone in a sturdy implant that serves to literally lift-up the spine freeing the nerves indirectly. To understand this affect think of an inversion table. By hanging inverted, gravity pulls the spinal column into alignment indirectly lining up the spinal nerves relieving pain. Unfortunately, we cannot hang upside down forever! With LLIF you CAN get that feeling permanently. The result is no need to directly access the nerves lessening the chance for painful scarring around the nerve or dangerous tearing of the dura.

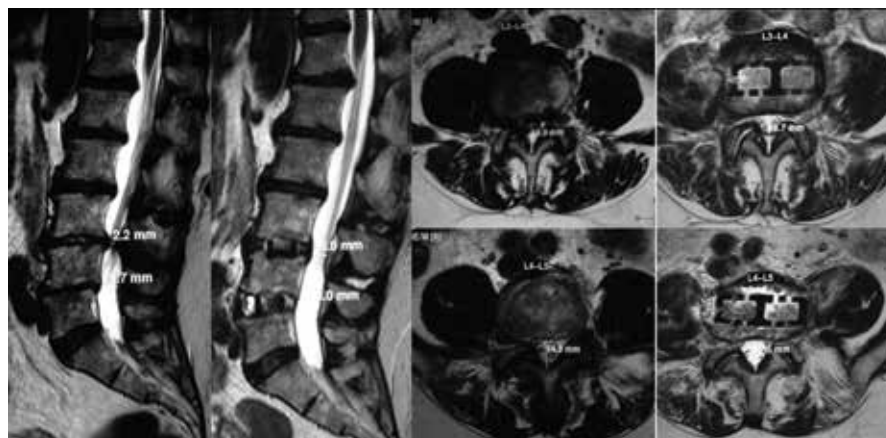


Fig. 2 Before and after MRI images showing the ability of LLIF to “open up” the previously tight spinal canal.

The power of the large implants can also straighten crooked spines. Scoliosis can afflict adults as the discs degenerate and the spine twists and curves. This painful condition does not always respond well to usual treatments like physical therapy or shots. With LLIF the curved spine can be straightened by leveling out the crooked disc spaces. I will often do this in a staged fashion with part 1 being the LLIF, and part 2 the “back” side where screws and rods are placed in a minimally invasive way to complete the surgery. Blood loss, pain, infection rate, and recovery are all dramatically reduced with this new approach.

If you think you could benefit from this new approach in spine surgery, please schedule an appointment to find out if you are a candidate.



Fig. 3 Before x-ray showing scoliosis and collapsed discs (red arrows) at nearly all levels causing a “flat back”. Notice the red circles in the right image showing the compressed tunnels where the lumbar nerves exit.



Fig. 4 After staged surgery using LLIF to straighten out the crooked spine and restore the natural “swayback” of the lumbar spine.

Fall Facts and Advice from The Experts

Millions of people ages 65 and older fall each year with extreme consequences. Not only are falls the leading cause of injury and/or death for seniors, taking a fall is also financially costly, and they can affect the quality of life of older adults and reduce their ability to remain independent.

The Culprits:

One thing to remember is that, though common, falling is not a natural part of the aging process and can often be prevented. Conditions that contribute to falling include:

- Lower body weakness
- Vitamin D deficiency
- Difficulties with walking and balance
- Use of medicines, such as tranquilizers, sedatives, or antidepressants. Even some over-the-counter medicines can affect balance and how steady you are on your feet.
- Vision problems
- Foot pain or poor footwear
- Home hazards or dangers such as broken or uneven steps, and throw rugs or clutter that can be tripped over.

These are called risk factors and the more of them you have, the greater the chance you are going to experience a fall. Most falls are caused by a combination of multiple risk factors.

The Solution:

Falls are preventable! They do not have to be part of the aging process. Doctors and other healthcare providers such as physical, occupational and speech therapists can help cut down a person's risk by reducing the fall risk factors. Aside from this, there are a number of simple things you can do to reduce fall risks.

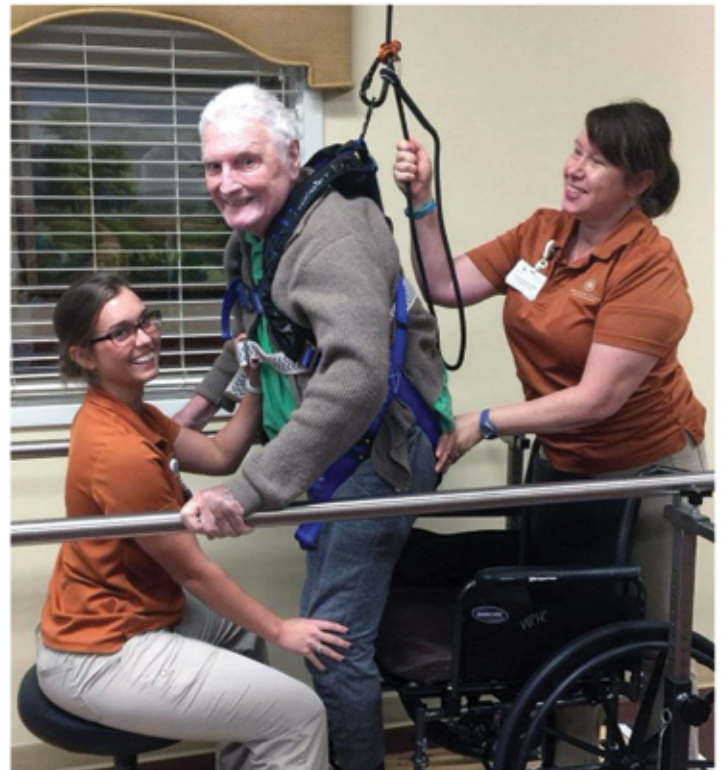
Talk to Your Doctor

- Ask your doctor or healthcare provider to evaluate your risk for falling and talk with them about specific things you can do.
- Ask your doctor or pharmacist to review your medicines to see if any might make you dizzy or sleepy. This should include prescription medicines and over-the-counter medicines.
- Ask your doctor or healthcare provider about taking vitamin D supplements.
- Ask about learning exercises that make your legs stronger and improve your balance. Tai Chi is a good example of this kind of exercise.
- Have your eyes checked by an eye doctor at least once a year, and be sure to update your eyeglasses if needed. If you have bifocal or progressive lenses, you may want to get a pair of glasses with only your distance prescription for outdoor activities, such as walking. Sometimes these types of lenses can make things seem closer or farther away than they really are.

Make Your Home Safer

- Get rid of things you could trip over such as slippery throw rugs and other clutter.
- Install grab bars inside and outside of your tub or shower and next to the toilet.
- Put railings on both sides of stairs.
- Make sure your home has lots of light by adding more or brighter light bulbs.

So you see, while falls can be a major problem for aging adults, it is possible to actively reduce risk factors to increase safety and reduce your risk of injury. For more information on Trilogy Health Services' Falls Prevention/Reduction programs and/or the services and amenities offered at our Louisville communities, contact a location near you today!



Therapists Kristina Daub (left) and Larysa Smith (right) at Westport Place Health Campus help patients like Earl H. decrease their risk of falls with the help of our new Solo-Step™ equipment.



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Total Shoulder Arthroplasty vs. Reverse Shoulder Arthroplasty

What is the Difference and When are They Used?



REVERSE SHOULDER ARTHROPLASTY

- reverses the normal “ball and socket” geometry of the shoulder
- moves the center of rotation medially and distal
- humeral shaft will not “ride up” and hit the acromion
- puts the deltoid on a stretch to increase its lever arm

INDICATIONS

1. cuff tear arthropathy
2. pseudoparalysis from cuff tear
3. 4 part proximal humerus fracture



TOTAL SHOULDER ARTHROPLASTY

- preserves ball and socket geometry, provides a smooth bearing surface
- requires an intact rotator cuff, cuff is repaired at end of procedure
- offers better range of motion than reverse shoulder

INDICATIONS

1. glenohumeral osteoarthritis
2. Avascular necrosis of humeral head.
3. Trauma - 2 or 3 part fractures involving the humeral head (head splitting)
4. Chronic Instability



The first shoulder replacement mentioned in the literature was performed in 1893 by the French surgeon Jules Emile Pean. The platinum and rubber prosthesis was created for a man whose shoulder had been destroyed by tuberculosis. Initially the procedure was successful, but 2 years later the shoulder became infected, necessitating the removal of the implant. Other attempts at shoulder arthroplasty were unsuccessful until the development of a vitallium prosthesis by Charles Neer in 1955. This metal head was developed to replace humeral heads damaged by either trauma or arthritis. The first prosthesis that also replaced the arthritic socket with a plastic socket was developed in the early 1970s. Initially, the life of these shoulder replacements was rather short. The usual mode of failure was loosening of the socket.

The first reverse shoulder was also developed in the early 1970s. As the name implies, the design reversed the “ball and socket” configuration of the normal shoulder by replacing the socket with a large metal ball and the humeral head (ball) with a plastic socket. The purpose of this implant was to treat what is called cuff arthropathy. This is a condition that develops when a large rotator cuff tear has occurred and the “ball” will not stay in the socket. The top of the humerus basically rides up and hits the bone above it, the acromion. This condition is very painful and debilitating. The usual function of the muscles that provide motion to the shoulder and with it, the entire

upper extremity are disrupted. Before the development of the reverse shoulder arthroplasty, our surgical options for this problem were limited and not very effective. Another diagnosis that is now treated much more effectively with the reverse shoulder arthroplasty is the complex fracture of the shoulder. When the normal attachments points of the cuff muscles have been injured by fracture, the reverse shoulder gives patients better pain relief and range of motion than previous options.

The Total Shoulder arthroplasty, by contrast, replaces the ball with a metal ball and the socket with a plastic socket. It preserves the normal configuration of the shoulder joint and simply replaces the bearing surfaces. It is intended to relieve pain and restore function in shoulders affected by arthritis or trauma, that have an intact and functioning rotator cuff. Over the years, the techniques for attaching the plastic socket to the underlying bone have improved significantly. The longevity of these prosthesis has become longer and is approaching that of hip and knee prostheses.

In the past three decades, great strides have been made in the designs of both the total shoulder replacement and the reverse shoulder arthroplasty. Arthritic conditions of the shoulder and fractures of the humerus used to be very debilitating to our elderly population. As surgeons, we now have much better options to restore function and relieve pain than previous generations of surgeons.



Knee Replacement Surgery for the Recreational Athlete

In the early days of total knee replacement (TKR) surgery, the goal of the procedure was to provide a knee that allowed an elderly patient disabled with arthritis of the knee to walk comfortably for the purpose of pursuing activities of daily living. In recent years these modest goals have dramatically changed. The aging baby boomer generation has expectations of maintaining an active and athletic lifestyle well into the later years of life. And ever younger patients with knee arthritis severe enough to interfere with participation in sports are demanding a surgical solution to their problem. To meet these societal demands an expectations, advances in knee replacement implant designs and surgical techniques have evolved. As a result, it is now possible for patients receiving knee (and hip) replacement surgery to lead active lifestyles and to continue to participate in recreational sports and vigorous exercise programs.

Challenges in TKR Surgery for the Athletic Patient

Unique challenges are faced by the surgeon in providing a stable knee that will respond to peak demands of athletics. These include:

1. Loss of the Anterior Cruciate Ligament (ACL):

Though in recent years there has been an attempt to design an ACL sparing knee replacement, these efforts have thus far either led to outright failure or are as yet unproven. In all clinically successful total knee replacement designs, the anterior cruciate ligament is sacrificed. The loss of the ACL creates challenges for the surgeon to build a new knee for the active patient that will be sufficiently stable

FIGURES 1, 2 & 3. The PCL (blue arrow) may be sacrificed or preserved. If sacrificed, the post (yellow arrow) of the tibial plastic insert abuts against a metal bar (red arrow) of the femur to provide posterior stability.

so as to withstand the stresses of vigorous exercise, strenuous work demands, and athletic activities.

2. Maintenance of “Perfect” Posterior Cruciate Ligament (PCL) Function:

Posterior knee stability (prevention of the tibia from sliding back under the femur) is crucial to the function of the knee in all active knee replacement patients. In the normal knee, the PCL (located behind the ACL in the center back of the knee) performs this function. Normal PCL function is essential for athletic movements such as jumping, pivoting, quick starting and stop-ping, and even for more routine activities such as stair climbing and kneeling. The PCL (as opposed to the ACL) is not always removed in TKR surgery.

In PCL Retaining implants, stability is dependent on the surgeon’s experience and skill in properly preserving, tensioning and balancing the PCL. If the PCL is too



loose, posterior laxity makes participation in sports difficult. If it is balanced too tightly, the ability to gain knee flexion is compromised. In PCL Sacrificing implants, posterior stability is an inherent part of the design but at a cost of sacrificing / removing more bone from the femur and placing more stress on the cement bond of the implants to the bone (due to this bone loss, PCL sacrificing implants are also significantly more difficult to re-vise, should the future need ever occur). The bottom line, for a TKR patient to remain athletically active, near perfect posterior stability must be maintained, either by the surgeons balancing and tensioning of the patients own PCL or by substituting for it via PCL sacrificing implant design. There are advantages and disadvantages to each strategy.

3. Collateral Ligaments Balanced: The medial and lateral collateral ligaments on the inside and outside of the knee must be evenly balanced and properly tensioned to provide side-to-side stability. In the process, preoperative mal-alignment such as “bowed” or “knock-kneed” deformity must be corrected.

Muscle Preserving (Minimally Invasive) Surgical Approach for the Athlete

For a rapid return to a high demand lifestyle, it is crucial that the surgical approach avoids cutting into the quadriceps muscle. This includes not only returning to athletics, but also to a high demand job or a vigorous exercise program. Experienced surgeons focused on and trained in quadriceps sparing minimally invasive surgical techniques can utilize this surgical approach in virtually all patients.



FIGURE 4. QUADRICEPS SPARING “MINIMALLY INVASIVE SURGERY”
The YELLOW line represents the distal incision into the joint common to all surgical approaches of the knee. The GREEN proximal extension of this yellow line represents the standard surgical approach into the joint that cuts into the quadriceps tendon and muscle, which delays recovery. The BLUE extension of the incision represents the Quadriceps Sparing approach that allows for immediate return of quadriceps function speeding rehab for the athletic patient.

Recovery Timeline for the Athletic Patient

- Hospital stay 1 night (some surgeons are doing outpatient surgery – I still like to watch patients overnight to make sure all is going well immediately post op)
- Physical therapy starts the day of surgery, with a vigorous therapy session the first day after surgery before being discharged
- Full weight bearing from the beginning. Off the walker / crutches as soon as tolerated, often after just a few days.
- Physical therapy (home and outpatient) for 6 weeks
- Exercise program to maintain leg strength recommended indefinitely.
- Light recreational sports allowed at 6 weeks post op
- Vigorous sports / activities at 3 months post op

Recreational Sports & Exercise Options for TKR Patients

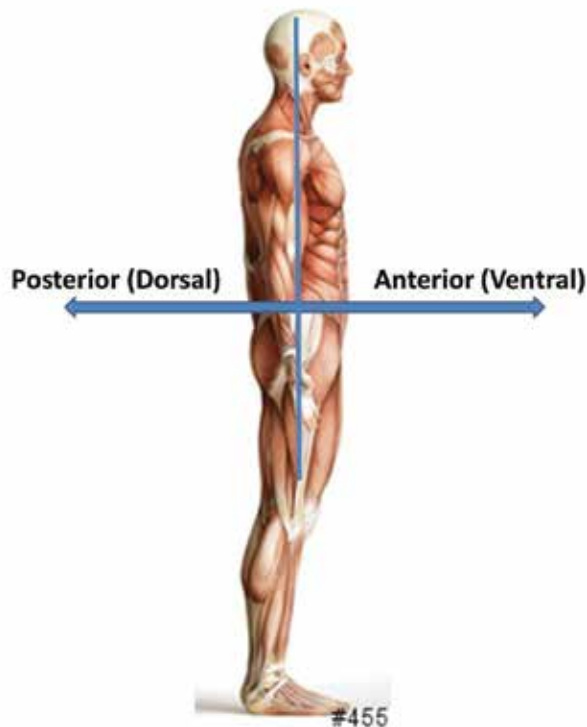
General Instructions: Most adult recreational athletic activities and exercise programs are possible in knee replacement patients. Activities that subject the knee to excess wear, impact, or risk of injury can shorten the goal of the knee lasting 2-3 decades. Brisk walking, exercise bikes, elliptical trainers, and treadmills are good aerobic substitutes for a running program. Stair climbing machines and the use of excessive weight on leg strengthening machines can sometimes create soreness and swelling in the knee. A resistive leg strengthening exercise program should be of a low weight – high repetition (30 reps or more) strategy. Most fitness class exercise programs are well tolerated, though “step” classes and those emphasizing the repetitive use of the “lunge” position can cause patellar soreness.

Sport Specific Instructions: With regard to participation in recreational sports, some judgement should be employed. Sports with a high risk of ligament injury to the knee should probably be avoided, as the consequences of such an injury are much greater (often leading to revision surgery). Tennis (especially doubles) and other racquet sports are well tolerated. Biking, even competitively, also is well tolerated. Golfing, even walking the course, should not be a problem. Patients should be able to participate in a vigorous exercise program. An experienced snow skier can resume their sport. Horseback riding is permissible. For the most part, returning to sports is a common-sense decision based on what a patient can tolerate without concerns for “damaging” the knee.



Total Hip Replacement

Answering Your Questions about the Anterior Approach



Q: What is the “anterior approach” to total hip replacement?

A: “Anterior” is a medical term used to describe a location on the body more towards the front. Posterior describes a location more towards the back. An anterior approach means that the incision is in the front of the hip joint, near the location of your front pants pocket.

Q: Why has the anterior approach become so popular?

A: The anterior approach, despite common belief, has been around longer than the more traditional posterior approach. Historically it was used for surgery on pediatric hips as well as other procedures. However, the approach was not popularized for hip replacement until more recently when a special table was designed to facilitate the procedure. This table is known as the “Hana Table.” Using the anterior approach, I am able to perform the entire hip replacement without cutting any muscles, something that is impossible from a more traditional posterior approach. Additionally, the anterior approach allows for better assessment of leg length and implant positioning. Patients are able to mobilize faster and have less pain postoperatively with the anterior approach, facts that has been well studied and documented in the orthopedic literature.



Q: What is the “Hana Table” and do you use it?

A: The Hana table is a specialized surgical table designed specifically to improve the surgical exposure of the hip and thus the results for the anterior approach to total hip surgery. The table helps secure the patient during surgery, makes exposure of the hip joint easier, facilitates proper implant positioning, and allows easy and precise X-ray verification of implants to ensure long lasting results of your hip replacement. I personally always use the Hana table for my anterior approach to hip replacement and believe that it makes the operation both easier and safer for my patients.



Q: How important is “implant positioning?”

A: The hip joint is made up of two parts, a ball and a socket. Both are replaced in total hip surgery. Without going into excessive detail, the components can be tilted and spun in nearly any direction when implanted. Through years of meticulous research, we know the positions that are safest and lead to good long term outcomes. Malpositioned components can lead to increased wear of the plastic liner and early failure of the hip. But most commonly malposition implants lead to a higher rate of hip dislocations, a devastating complication of total hip replacement. The subtleties of implant malpositioning can lead to many complications, and ensuring accurate placement is the most crucial part of any hip replacement. The anterior approach is famous for minimizing these complications to an absolute minimum.

Q: Is the anterior approach really a better approach for hip replacement?

A: This is not an easy question to answer. If you were to poll 10 different orthopedic surgeons you would likely get 10 different answers. All surgeons have certain innate biases based on their training and experience. I do personally believe that the anterior approach is a better way to perform a hip replacement than the more traditional posterior approach. And the reasoning is multifactorial:

1. With the patient lying on their back for the anterior approach I am able to precisely judge the component positioning. When patients are placed on their sides for the posterior approach they tend to lean forward or backwards during surgery, often times moving as the surgery progresses, making accurate placement of the components difficult.
2. Additionally the X-Rays that I am able to obtain while the patient is secured on their back to the Hana table are of much better quality, leading to improved understanding of the position of the implants throughout surgery. This produces high quality data from the beginning of surgery until the end. Most surgeons utilizing a posterior approach do not use X-ray or use one solitary image. From an anterior approach I can use X-ray technology from



multiple angles and views throughout the entire case, to truly understand your anatomy and get a properly positioned implant. I know when I leave the surgical suite that your hip is in optimal position to endure the rigors of life for a long, long time.

Q: Are the risks the same or different for an anterior approach?

A: The real answer is a little of both. Most of the biggest risks of surgery which are infection, complications from anesthesia, blood clots and medical complications exacerbated by surgery are present no matter how the surgery is done. These are the risks that every surgeon tries to minimize. However, the anterior approach does have risks that are particular to it, as well as many benefits of reducing or nearly eliminating the risks of other approaches. Most surgeons have a surgical approach that they perform best in their hands. For me, I believe that the anterior approach allows me to obtain the most reliable results while minimizing complications.

Q: Is the recovery different?

A: Although you have probably heard things about how the anterior hip is a faster recovery from surgery and is “minimally invasive,” you need to be aware that there is no minimally invasive way to cut and remove bone from your body. This is a big operation and that is independent

of approach or surgeon, no matter what you may hear in the media. That being said the anterior approach offers several advantages over other approaches

1. It is the only approach that requires no cutting of muscles. The entire approach is done in between the thigh muscles, which can greatly improve recovery time.
2. Certain muscles around the hip are absolutely vital to your mobility. When these muscles are damaged or cut it can lead to a serious limp post operatively. Because no muscles have to be cut or released with the anterior approach like with other approaches, there is no limp after recovery. You will be back to walking with a normal cadence much faster with an anterior approach, a fact that has been well studied.
3. A small incision can be used to do this operation with minimal complications because we can use X-ray to ensure the entire surgery goes as planned.
4. With less damage done to your muscles and soft tissues using the anterior approach, pain is usually significantly less immediately after surgery.

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Cortisone vs. PRP Injections

A healthy joint requires balance between molecular signals regulating homeostasis, damage, restoration and remodeling. This balance involves balance among different tissues such as cartilage, bone, synovium, ligaments, tendons and menisci. Different factors are able to improve the maintenance of a healthy joint that has been damaged or strained.

What is cortisone?

How does it work?

Cortisone is a synthetic version of cortisol, a steroid produced by the body's adrenal glands. Cortisone medications mimic the action of cortisol but tend to be more powerful. Cortisone injections work by decreasing inflammation. Many patients mistakenly think that cortisone only serves to cover up pain, but that's not really true. Cortisone can be a very effective method to reduce the inflammation caused by a variety of common orthopedic conditions including tendonitis, bursitis, arthritis and gout. Once the inflammation subsides (3-5 days after injection), pain relief follows.

If the inflammation is severe, or if the inflammation has been around a long time (chronic), the cortisone injection may take longer to take effect and may require more than one injection. Not every patient will respond to a cortisone injection, but the good news is that most people find this to be an excellent treatment for many common inflammatory conditions. If the patient tolerates these injections well, they can safely be repeated every 3-4 months.

What is PRP?

Platelet Rich Plasma is a blood derivative that has a higher platelet concentration than whole blood. When activated, these platelets release proteins and growth factors that promote cellular repair, growth and modulate inflammation. PRP has been used for over 20 years in medicine. Currently, PRP is administered to almost 86,000 athletes in the United States and Europe acute and chronic tendon, ligament and muscle injuries.

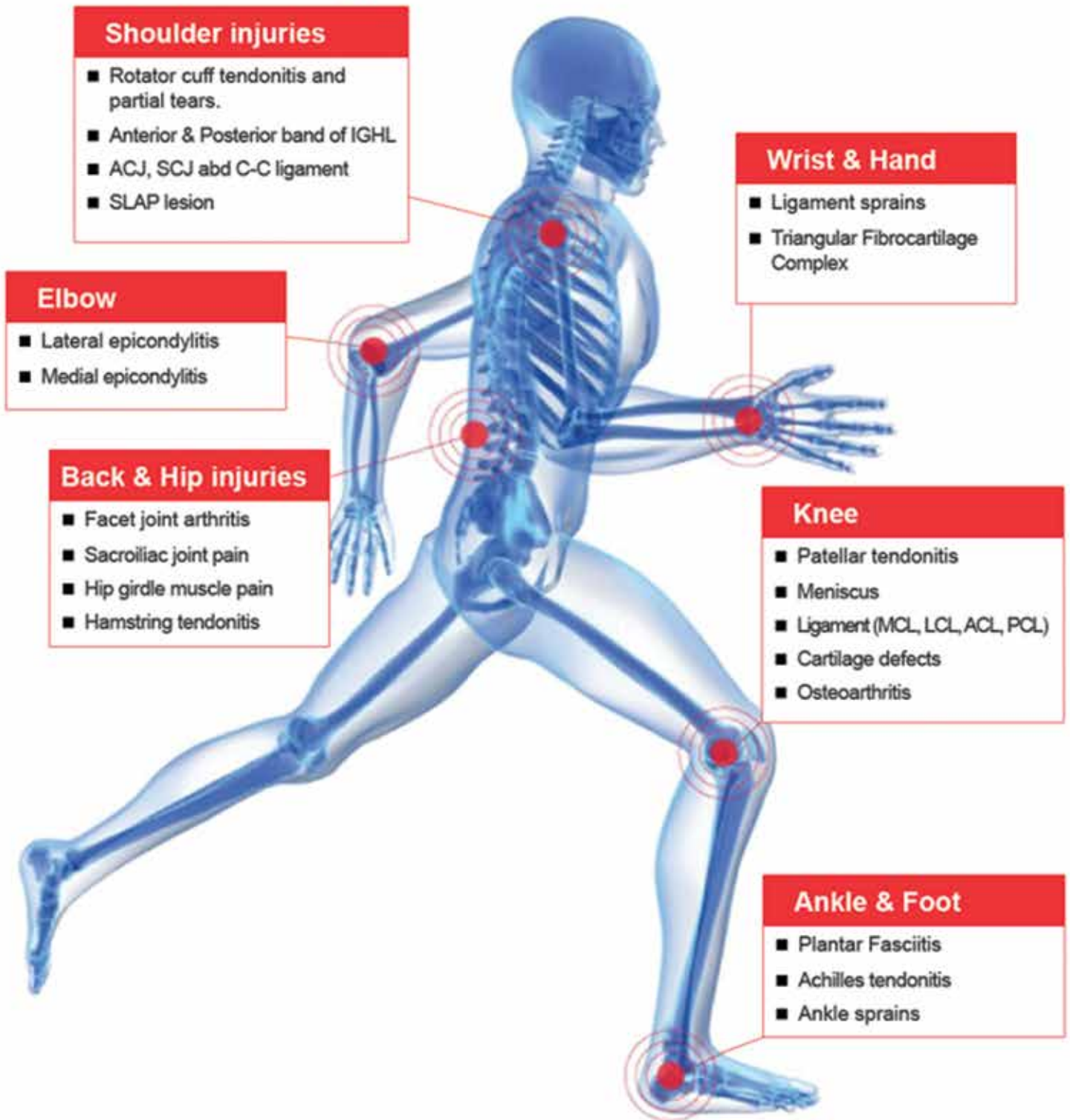
How is it used? Indications?

This injection is increasingly being used as a regenerative therapy to treat various tendinopathies. PRP can be used in the treatment of chronic, non-healing tendon injuries including lateral and medial epicondylitis, patella/Achilles/rotator cuff tendons, among others.

The use of PRP in treatment of degenerative knee osteoarthritis has grown over recent years due to high level of safety and ease of administration. Studies have noted that PRP is effective in regards to pain treatment and knee joint function and when compared with hyaluronic acid, the effects last longer (6-12 months).

PRP is safe because it is an autologous products derived from a patient's own blood. There is no risk of rejection or disease and only a very small risk of infection site and donation site. There are no adverse side effects unlike the widely used NSAIDS (Aleve, Advil, Motrin, Ibuprofen, Mobic, Diclofenac) which we know to affect the gastrointestinal, cardiovascular, and renal systems. PRP

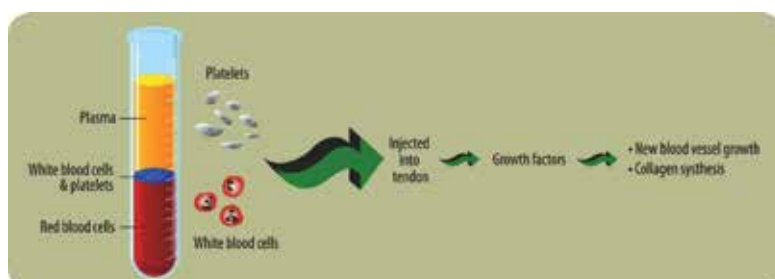
Platelet rich plasma treatment areas



may not lead to cartilage regeneration, but offers clinical benefit with symptom and function improvement and possibly a slowdown of the degenerative processes.

How does it work? What is the procedure?

PRP therapy uses components of the body's own blood cells to formulate a customized 'cocktail' that stimulates the natural healing process in certain orthopedic conditions. The body's first response to any soft tissue injury is to deliver platelet cells. Filled with healing and growth factors, platelets jump start the repair process and attract the essential aid of stem cells. PRP therapy's natural healing process magnifies the body's efforts by delivering a higher concentration of platelets through a simple injection. PRP therapy is associated with reduction in pain and faster healing and has lower risks and lowers costs than surgery injection.



Approximately 15-30mL of venous blood is drawn from patient and collected into a tube. The tube is then centrifuged for 5-15 minutes which separates the blood into 3 distinct layers (platelet poor plasma, red blood cells, and WBC/platelets). The PRP (WBC/platelet layer) is then injected into the affected area on the patient. Rest, depending on pain, and ice are indicated the first 24 hours after the injection. Patients can resume NSAIDS if needed. Up to three injections may be given within a 3-month time frame, usually performed 4 weeks apart. You may, however, gain considerable to complete relief after the first or second

The goal of PRP therapy is to resolve pain through healing. Initial improvement may be seen within a few weeks, gradually increasing as the healing progresses. Studies have shown PRP therapy to be effective at relieving pain and returning patients to their normal activities and daily lives. Both ultrasound and MRI images have shown definitive tissue repair after PRP therapy, confirming the healing process. The need for

surgery can also be greatly reduced by treating injured tissues before the damage progresses and the condition is irreversible.

What is Hyaluronic Acid (HA)?

In your knees, hyaluronic acid is a thick, slippery fluid that helps cushion, lubricate, and protect the bones and joint tissue. With osteoarthritis (OA) of the knee, the HA gets thinner over time and becomes less able to provide protection. HA injections (Euflexxa, Orthovisc, Hyalgan, etc) are used to relieve OA knee pain in people who do not get enough relief from simple pain medications or from exercise and physical therapy. These injections replenish HA, helping provide pain relief. This pain relief has been shown in clinical studies to provide pain relief for up to 6 months. These injections are put directly into your knee to work right at the source of the pain. Treatment consists of 3 injections—1 injection per week for 3 weeks. Some people experience moderate pain relief after the first or second injection, but most people experience significant relief after the third injection. These injections can safely be repeated every 6-12 months as needed.

What is Amniofix?

The use of amniotic tissue has been documented in published literature since the early 1900s. Amniotic membrane has been the subject of many scientific publications evaluating its use in decreasing inflammation and scar tissue and enhancing healing. Amniotic membrane tissue is donated by healthy consenting mothers undergoing scheduled Caesarean sections. The amniotic membrane is the cover (membrane) surrounding the baby, and is typically discarded after the baby is born. The recovery of the membrane does not affect the baby or the delivery process. Therefore, the donation process does not share the ethical concerns associated with embryonic tissue.

Amniotic tissue contains growth factors which are powerful agents that our bodies produce to signal cells to come to the target site, help the site to heal, and help your own cells regenerate the damaged tissue. Patients who may benefit from this type of injection are those who have been diagnosed with an injury resulting in inflammation, prefer a non-steroidal option, or have failed other conservative therapies.



What are “Stem Cell” procedures?

Adult stem cells are cells from your own body that can renew themselves and turn into other cells (differentiate). They live inside all of us in various tissues, poised to leap into action to repair damage as it occurs. As we age or have big injuries, we may not be able to recruit enough of these cells to the site to fully repair the area. Stem cell procedures help overcome this problem by extracting stem cells from an area of high volume (bone marrow), then concentrating the cells and reinjecting them into the damaged area to help the body heal naturally. The goal is to deliver much greater numbers of stem cells to the injured area than your body can deliver on its own.

Some protocols are a same-day procedure, because the stem cells are harvested and reinjected on the same day. However, for most patients the complete protocol is actually a series of injections that happen over the course of about a week, depending on your unique situation. These injections include a pre-injection of local anesthetic, a same-day stem cell extraction and reinjection procedure.

* Materials borrowed from the American Academy of Orthopaedic Surgeons. More information can be found at www.aaos.org

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Preventing and Returning from Athletic Injuries



By Daniel Love, PT, DPT

If you talk to sports medicine experts, coaches, parents, and athletes about sports injuries, you won't be too far into the conversation before two items come up: 1) how can we prevent injuries?, and 2) how can we help athletes return after injuries faster and safer? This has long been an area of focus for sports medicine teams, and newer research and technology is paving the way to help athletes stay out of medical offices and on the playing fields. Below you'll find some tips for staying injury free along with information on a new technology that is helping our KORT clinicians prevent and return athletes from injuries!

Staying injury free

1) Don't specialize at a young age.

More and more athletes are specializing to a single sport at younger and younger ages; yet more and more research is showing how this is a bad idea for athletic development, injury resilience, and even success at that individual sport. A general rule of thumb is to not train more than 9 months with a single sport as focus.

2) Strength train.

Athletes are bigger, stronger, and faster than ever before, and young athletes are no exception. No matter the sport, most of our athletes are competing at levels that were previously only occupied by the best of the best. Similarly, athletes are making moves and participating in games and drills with more speed than ever before. All of this requires a strong musculoskeletal system to help prepare for these high loads of training. Athletes should be completing true strength training at least 2x/week to help their bodies be ready to compete.

3) Avoid spikes in training load.

One of the biggest hits in Sports Medicine research over the last 2 years has been an area looking at the importance of not having up/down times in training. Sometimes training hard gets a "bad name", but training hard is often not the problem; instead training hard when you haven't trained enough leading into it is often the problem. This is most likely to happen at the beginning of pre-season workouts when athletes have taken time off in bigger chunks. Training should always ramp up and down slowly and with intent – plan your offseason just like your in-season.

4) Complete skill/movement drills and strength training when fatigued.

The majority of non-contact injuries occur later in the second half of games/practices yet "hard training" is often completed when the athlete is fresh. Focusing on skill and technique drills along with strengthening when tired can help an athlete's body be prepared to move and perform on the field when it really matters. Focus on technique when tired, and the body will be more likely to respond with the right movement patterns.

5) Recover!

While the large majority of conversation regarding athletic development is focused on the "active" stage, recovery is at least important in an athlete's health and performance. Sleep, nutrition, planned time off, and even altering training when needed will help ensure athletes are ready to perform at their best when it really counts.



Returning from injury

If you are an athlete that is already injured, returning as quickly as possible and as healthy as possible becomes your number one priority during rehabilitation. Sports medicine providers use many different approaches and tools to assess an athlete's readiness to return to action.

dorsaVi™ is a new technology that offers sports medicine providers the use of wearable sensors to deliver biomechanics-lab level data previously unavailable to therapists and communities outside of research. It is the only FDA-approved wearable sensor technology and is used to assess movement patterns for athletes.

The information from using the dorsaVi™ technology along with assessment such as hop testing, pro agility drills, and strength ratios help clinicians identify key side-to-side differences and deficits in movement patterns. These findings assist providers in making return-to-play decisions and help in creating tailored programs specific to each athlete's individual needs. After identifying areas of concern, athletes can work on specific programs before undergoing retesting to appreciate the improvements made over the course of training.

KORT is excited to offer this technology to our communities and patients for both injury prevention and to assist in return-to-sport after injuries. dorsaVi™ is offered in two ways: 1) as part of typical therapy services with no additional billing charges out of the ordinary, or 2) as performance/injury prevention services available to individuals wanting to pay out of pocket or for groups/teams wanting to set up group screening. dorsaVi™ can also be paired with another KORT offering – the ACL Play It Safe™ program, which is a fatigue-based program used for performance enhancement and prevention of lower extremity injuries.

For more information, contact us at www.KORT.com or 1-800-645-KORT.

Daniel Love, PT, DPT is the clinic director at KORT Corydon, IN.





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PHYSICAL THERAPY QUIZ

1. If you had a right leg injury, in which hand would you hold your cane?

- A. The right hand.**
- B. The left hand.**

Answer: If you chose the left hand you would be correct. Most people without proper instruction believe the cane goes on the same side to support the leg. Even most TV shows and movies demonstrate this. The cane goes in the opposite hand for several reasons. When we walk normally the opposite arm moves in unison with the opposite leg. Using the cane in the opposite hand allows a more normal walking pattern. When placing the cane and the injured leg forward it allows you to unload the leg by placing weight through the arm using the cane. This also allows a triangular base with the three points touching the ground for better balance.



2. You have a swollen right ankle and have been told to elevate the leg to help manage the swelling. Which of the following is an acceptable way to elevate your leg?

- A. Lying flat on your back in bed.**
- B. Sitting in a chair with your leg straight out propped up on another chair.**
- C. Lying back in a recliner.**
- D. Lying flat on your back with the foot elevated above your heart.**



Answer: The correct answer is D. This is a very common discussion in physical therapy. People are confused at times as to why at the end of the day they may have more swelling. They sat most of the day minimizing their activity and may have even sat with the leg propped up on another chair or

PHYSICAL THERAPY QUIZ

recliner most of the day. True elevation to manage swelling is having the area above your heart. This allows gravity to assist in moving the fluid back towards the heart. The heart is the pump and the further away the injury the more difficult it is to improve circulation to allow dissipation of the swelling. Our circulatory system also relies on movement of the arms and legs to increase circulation. This is often diminished when we have an injury and are less active or immobilized.

Some strategies for proper elevation are lying in bed or on a couch and turning a laundry basket upside down with a pillow on top to support the leg. The laundry basket is more firm than several pillows and will allow better support and the proper elevation. You may lie flat on the couch and rest your leg on top of the back of the couch. These are also good positions to apply ice if desired.

3. If you have an acute(sudden) injury what do you do? One acronym for management of this injury is called the RICE principle. What does RICE stand for?

- A. Relax, Ice, Cry, Elevation.**
- B. Rest, Ice, Compression, Eat**
- C. Rest, Ice, Compression, Elevation.**
- D. Relax, Ice, Complain, Elevation.**

Answer: The correct answer is C. The RICE principle is basic initial management of an injury. Rest the injured area to protect and prevent further injury. Ice the injured area to help with pain, swelling, and inflammation. Compression will help minimize swelling as well as provide support to the injured area. Elevation above the heart will help to control swelling by allowing gravity to assist in moving the fluid back towards the heart.



Physical Therapy utilizes some of these same principles with injury management. Modalities such as electrical stimulation, heat or ice, and ultrasound can minimize pain and swelling. Education in proper exercises and movement will aide in healing.

4. The rotator cuff is primarily made up of _____ muscles.

- A. Three.**
- B. Four.**
- C. Two.**
- D. Five.**

Answer: The correct answer is B. The four primary muscles of the rotator cuff: Supraspinatus, Infraspinatus, Teres minor, and the Subscapularis. The primary function of this muscle group is to assist with raising the arm above shoulder level and reaching out away from your body or behind your back. A rotator cuff tear or injury can involve one or more of these muscles. There is also a thickness to the tendon. It is not like tearing a piece of paper. A tear may be partial thickness or full thickness. Rehab following a rotator cuff injury or repair varies from patient to patient. It is very difficult to compare one injury or repair to another. The physical therapist will guide you through the rehab process based on a specific individualized treatment plan. They will teach each patient precautions and activities to avoid or modify to allow maximum healing. This may include using modalities like electrical stimulation, heat or ice, and ultrasound to help manage pain and inflammation. The physical therapist will prescribe each individual patient with specific exercises to perform in the clinic as well as a home exercise program.



5. If your physical therapist has you working on proprioception [proh-pree-uh-sep-shuh n], they are working on what?

- A. Balance.
- B. Dynamic movements.
- C. Body awareness in space.
- D. All of the above.

Answer: The correct answer is D. Proprioceptive activities and/or exercises are primarily focused on movement and body awareness in space. An ankle sprain/injury would be a common problem. There are neural receptors in your joint that help with body awareness in space. We rely on and gather a significant amount of our balance and body awareness from visual feedback. Often times someone will sprain an ankle and have good range of motion and strength and will end up re-injuring the ankle by returning to dynamic activities too soon. They have not taken the extra step to train these receptors in the joint/muscles to assist with body awareness and tactile input with dynamic activity like jumping and landing. Try standing on 1 foot without holding on with your eyes open and then try it with your eyes closed and see the difference. A physical therapist will be able to teach you the appropriate exercises to perform to allow for a full recovery and prevention of future injuries.



Physical Therapy is a useful resource for patient education, injury management, post-surgical rehab, and proper exercise prescription and progression to maximize healing for a positive outcome. The physical therapist will also teach you a specific home exercise program and activity modification to allow you to return to your prior level of function.



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TTU, hosted by local churches, offers health assessments and health education to the uninsured and under-served in our community. Middletown UMC assisted with this clinic in the Portland neighborhood with the help of local medical professionals.

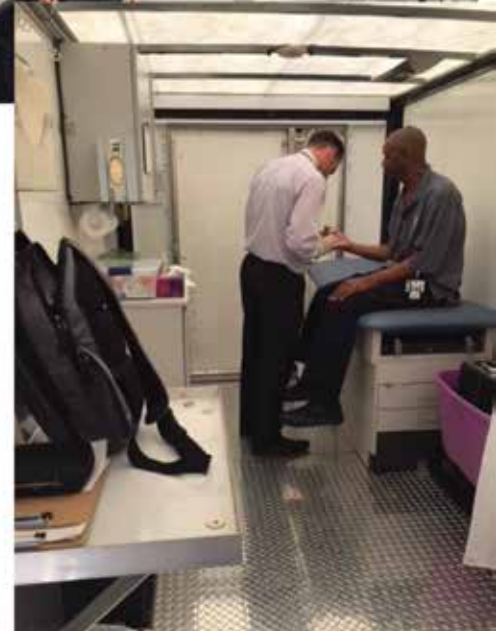
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The Family Community Clinic and Middletown United Methodist Church hosted an event to provide medical care and screenings to the under and uninsured in Old Louisville. Volunteers, like **Jordan Tinnell, PA-C** and other medical professionals help make these types to events possible.

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Twice per year Dr. Quill travels to Guatemala, as a volunteer with the Children of the Americas group, to perform orthopedic surgery on children who could not otherwise afford these procedures. The second trip is made to provide follow-up care for patients whom he previously treated and to ensure any post-op concerns are appropriately addressed to ensure a successful surgery and recovery.

During these trips, volunteers train local physicians in techniques needed for appropriate aftercare. These images are from his most recent trip in 2018.



Dr. Quill with his patient after surgery.



Dr. Quill with his patient.



Dr. Quill with a patient and his family.



Dr. Quill's patient pre-op.



Dr. Quill's patient post-op.

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**Board Certified ~ Fellowship Trained
Pain Management Specialist**

Dr. Compton is an interventional pain management specialist treating individuals with challenging orthopaedic and spine pain conditions. He is board certified in

Anesthesiology and Pain Medicine by the American Board of Anesthesiology. He is also a member of several national and regional medical and pain specialty societies. He has authored several publications and presentations on topics of chronic pain. Prior to joining Louisville Orthopaedic Clinic, Dr. Compton served as Medical Director of the Pain Center at Schneck Medical Center in Seymour, Indiana for six years.

Dr. Compton was born and raised in Somerset, Kentucky. He earned his undergraduate degree at Murray State University, and his M.D. from the University of Louisville School of Medicine. He then completed his residency in Anesthesiology at the University of Louisville, receiving honors as the outstanding resident in Pain Medicine. He then completed his fellowship in Pain Medicine at University Hospitals Case Medical Center in Cleveland, Ohio, as Chief Fellow.

Dr. Compton utilizes a multimodal treatment approach to managing pain, with goals of minimizing the need to rely on opioid pain medication (narcotics). He offers numerous minimally invasive procedural options, when appropriate, to restore your function and reduce your pain.



RICHARD "ALEX" SWEET II, MD

**Fellowship trained in Knee and
Hip Reconstruction**

Dr. Alex Sweet is the son of Dr. Rick Sweet Sr. Like his father, Dr. Sweet specializes in the area of hip and knee replacement surgery.

He was born and raised in Louisville, KY and went on to attend the University of Louisville School of Medicine. He next completed his residency at the University of Hawaii. Following in his father's footsteps, he completed the prestigious Otto E Aufranc Fellowship in Knee and Hip Reconstruction at the New England Baptist Hospital in Boston, becoming the first legacy of the fellowship since its creation in 1970.

Dr. Alex Sweet specializes in minimally invasive hip and knee reconstructive surgery, including the anterior hip approach for total hip replacement, computer navigated total hip replacement, and minimally invasive total knee replacement. Partial knee replacement and rapid recovery outpatient surgery are also among his area of specialty. Benefitting from the most up to date training available to orthopedic surgeons, Dr. Sweet is skilled in the newest techniques and technology available today.

An accomplished collegiate athlete, swimming for Washington and Lee University, Dr. Sweet was a 17 time All-American, set 7 school records and won the 50 freestyle his senior year in an NCAA record time. After graduating he competed in the 2008 US Olympic Trials in Swimming. He also swam for the University of Louisville during his first year of Medical School where he set 2 school records and again became an All-American.



SARAH B. ZERHUSEN DNP, APRN, NP-C

Sarah is a certified Nurse Practitioner working alongside Madhu R. Yakkanti, M.D, who specializes in the area of hip and knee joint replacements and fracture management. She grew up in Louisville and graduated from Centre College where she earned a B.S. in Biology. While attending Centre, Sarah was a four time all-conference and all-American honorable mention volleyball player. After graduating from Centre, Sarah obtained a B.S. in Nursing from Bellarmine University. She then completed her graduate degree at the University of Kentucky where she earned a Doctorate of Nursing Practice specializing as a Family Nurse Practitioner.

Previous to her employment at the Louisville Orthopedic Clinic, Sarah gained experience in orthopedics as a staff nurse in the trauma/surgical intensive care unit and outpatient surgery center at the University of Louisville Hospital, where she worked for six years. She also gained experience in medical and pharmaceutical research after serving as a clinical research coordinator for two years.

Sarah became board certified through the American Academy of Nurse Practitioners Certification Board in 2018 and has been practicing in orthopedics. She is a member of the American Academy of Nurse Practitioners (AANP) and was inducted into the Sigma Theta Tau International Honor Society of Nursing in 2011.



KATIE HARRELL, APRN

Katie is a nurse practitioner working in collaboration with Aaron K. Compton, M.D. specializing in treating acute and chronic painful orthopaedic and spine conditions. She graduated Magna Cum laude from Bellarmine University with a Master's of Science in Nursing. She also has a Bachelor's degree of Science in Nursing from the University of Kentucky 2012 and received her Master's in 2016.

Katie became board certified by the American Academy of Nurse Practitioners in 2016. She is a member of the American Academy of Nurse Practitioners, The Kentucky Coalition of Nurse Practitioners and Nurse midwives, and a member of Sigma Theta Tau.



RICHARD A. SWEET, M.D.

Dr. Sweet specializes in the area of total joint replacement. He completed the Aufrank Reconstruction Fellowship in joint replacement surgery at the New England Baptist Hospital in Boston. He has been involved in both clinical and scientific research in this field, which has included implant and instrument development for hip and knee replacement surgery. These research and development efforts have focused particularly on minimal incision techniques. An avid teacher, he often conducts seminars on the subject of total joint replacement for both medical personnel and the community at large. This includes physician cadaver lab teaching of minimal incision total knee replacement and total hip replacement surgery. He has a special interest in sports medicine and particular expertise in knee reconstructive surgery.

Dr. Sweet was born in Kentucky and earned his undergraduate and medical degrees at the University of Kentucky. He served his residency at the University of Louisville. He belongs to all the state and local medical societies and is board certified in orthopaedic surgery.



GEORGE E. QUILL, JR., M.D.

Dr. Quill is one of the region's first fellowship-trained orthopaedic surgeons sub-specializing in disorders of the foot and ankle. His academic appointments are quite numerous, and many awards and honors have been bestowed on him. His research and writings on the subject of the foot and ankle have been extensive, including seventeen published articles, five book chapters, and Academy-sponsored instructional videotapes and DVDs.

He gives many scientific presentations each year on the subject of foot and ankle disorders, and is a member of the clinical faculty at the University of Louisville School of Medicine. Current interests are in foot and ankle reconstruction and orthopaedic device development. Dr. Quill is a consultant to numerous orthopaedic implant manufacturers, and he maintains an interest in implant design and orthobiologic research.

Dr. Quill was born in Chicago, Illinois. He attended the University of Notre Dame, earned his medical degree at Northwestern University, and completed his residency at Chicago's Rush-Presbyterian-St. Luke's Medical Center. His fellowship was completed in Baltimore at Union Memorial Hospital. He is board certified and voluntarily re-certified in orthopaedic surgery.



SCOTT D. KUIPER, M.D.

Dr. Kuiper specializes in shoulder, knee, and elbow arthroscopy, as well as the treatment of athletic-related injuries. He completed his fellowship training at the world-renowned American Sports Medicine Institute in Birmingham, Alabama. He participated in the care of Auburn athletics and cared for numerous NFL, NBA, and NHL athletes with his mentors James R. Andrews, M.D. and William Clancey, M.D. Dr. Kuiper has published basic science research on ACL reconstruction, book chapters on PCL reconstruction, and a number of peer-reviewed papers on shoulder surgery. He has helped to develop state-of-the-art implant devices for rotator cuff and labral repair. He has been voted a *Louisville Magazine* "Top Doc" for orthopaedic surgery several times and, most recently, he was selected by his peers as one of *Louisville Magazine's* "Top Surgeons" for Knee Arthroscopy, ACL Reconstruction, and Shoulder Arthroscopy.

Dr. Kuiper earned his undergraduate degree at DePauw University and attended the University of Louisville School of Medicine. He completed his residency, as well as an Orthopaedic Research Fellowship at the University of California, San Diego. He then completed an Orthopaedic Sports Medicine Fellowship under the direction of Drs. James R. Andrews and William Clancey in Birmingham, Alabama. He is board certified in orthopaedic surgery, and is a fellow of the American Academy of Orthopaedic Surgeons and a member of the American Orthopaedic Sports Medicine Society, as well as other national, state and local medical societies.

Dr. Kuiper is the team physician for St. Xavier High School and Sacred Heart Academy. He is a consultant for Spalding University and Indiana University Southeast baseball teams.



TY E. RICHARDSON, M.D.

Dr. Richardson specializes in orthopaedic sports medicine and athletic injuries. He attended Baylor University and earned his medical degree at the University of Texas Medical Branch. He completed his orthopaedic residency at the University of Louisville, receiving numerous honors and awards. He has done extensive research and presentations in orthopaedic trauma.

Dr. Richardson attended an Orthopaedic Sports Medicine Fellowship at the Hughston Clinic in Columbus, Georgia. He is board certified in orthopaedic surgery. He is currently the team physician for Manual High School.



ROBERT A. GOODIN, M.D.

Dr. Goodin is a Louisville native earning his medical degree and completing his orthopaedic residency at the University of Louisville, where he received numerous honors and awards. He has done extensive research and presentations in hip and knee techniques. He also completed the Adult Reconstruction Fellowship at Indiana University Medical Center.

Dr. Goodin became board certified by the American Board of Orthopaedic Surgery in July 2004. He is a member of local and state medical and orthopaedic societies, as well as the American Academy of Orthopaedic Surgery.



J. STEVE SMITH, M.D.

Dr. Smith is the Medical Director of Baptist Sports Medicine. He is also the team physician for Ballard High School and North Oldham High School. In addition, he was on the medical staff of the LA Lakers, LA Dodgers, USC Football Trojans and numerous other collegiate and high school sports teams. He

has published numerous research papers, abstracts, and has made presentations relating to the advancement of arthroscopic surgery in sports medicine.

Dr. Smith is a native of Kentucky earning his undergraduate degree at Western Kentucky University and attending the University of Kentucky College of Medicine. He completed his internship and residency at the University of Rochester in New York, and then completed his orthopaedic sports medicine fellowship at the Kerlan-Jobe Orthopaedic Clinic in Los Angeles, California. He is board certified in orthopaedic surgery and is a member of many national, state, and local medical societies.



VENU VEMURI, D.O.

Dr. Vemuri specializes in the treatment of and procedures related to diseases of the spine. He received the Orthopaedic Student of the Year award for excellence in orthopaedics from Midwestern University's College of Osteopathic Medicine. Following his position as Chief Resident during his final year of residency in orthopaedic surgery, he went on to complete advanced training in orthopaedic and neurosurgical spine surgery. Dr. Vemuri completed this additional training at Louisville's Norton Leatherman Spine Center through their Spine Fellowship program.

While Dr. Vemuri is a spine surgeon, he is committed to exhausting all non-surgical treatment options before considering surgical intervention. His primary objective is to help patients get back to enjoying their lives through restoring function from painful spinal conditions. His interest in minimally invasive surgeries is due in large part to increased chances for reduced blood loss, less tissue damage, and a faster recovery time for his patients.

In addition to his medical degree, Dr. Vemuri also has a bachelor's in Cello performance from Lawrence University Conservatory of Music and a master's degree in Cello performance from the world renowned Indiana University Jacobs School of Music.



MADHU R. YAKKANTI, M.D.

Dr. Yakkanti specializes in the area of fracture management and total joint replacement. He completed his Orthopaedic Trauma Fellowship and Adult Reconstruction Fellowship at University Hospital and Jewish Hospital in Louisville. He has extensive surgical training and experience in managing complex and complicated fractures, as well as, hip and knee replacements. By virtue of his experience he has a special interest in managing geriatric orthopaedic fractures.

Dr. Yakkanti has a long association with teaching the art of Orthopaedic surgery. He was awarded the best resident teacher award on multiple occasions in his role as assistant professor of Orthopaedics at the University of Louisville. He regularly communicates with his peers, students and teachers regarding management of complex orthopaedic problems. He participates in annual academic meetings of Orthopaedic societies on a regular basis. He is a member of the American Academy of Orthopaedic Surgery, Orthopaedic Trauma Association, American Academy of Hip and Knee Surgeons, Mid America Orthopaedic Association, Kentucky Orthopaedic Association, Kentucky Medical Association, and Fellow of American College of Surgeons.

Dr. Yakkanti was born in India where he earned his basic medical education and completed his Orthopaedic residency training. He went on to complete advanced training in managing complex fractures and poly trauma at the University of Louisville. He then completed the adult reconstruction fellowship at the University of Louisville. Dr. Yakkanti is board eligible by the American Board of Orthopaedic Surgery.



WILLIAM SLIGAR, MD

Dr. Sligar joined our practice as of January 2016. He works exclusively at our clinic location in New Albany, IN.

Dr. Sligar has had a long and successful career practicing as a general orthopaedic surgeon. With this experience, he welcomes and treats an array of orthopaedic diseases and conditions. He earned his Bachelors of Science and Medical Degree from Tufts University in Medford, MA. Following his internship and residency at Case Western Reserve University Hospitals, he served as a lieutenant commander in the U.S. Navy.

A native of Indianapolis, Dr. Sligar has spent most of his professional career practicing in Indiana. He served two terms as Clark Memorial Hospital's Chief of Staff and President Elect of Medical staff.



JOHN LEWIS JR., MD

Dr. Lewis specializes in all disorders of the foot and ankle, including athletic injuries, ankle sprains, trauma/fractures, Achilles and other tendon injuries, deformity correction, joint preservation, and forefoot conditions including bunions and hammertoes. He has had extensive training in complex ankle reconstruction for patients with ankle arthritis and has a special interest in performing ankle replacement surgery. He has published multiple articles, book chapters, and review papers as well as given numerous presentations at regional and national meetings of the American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society.

Dr. Lewis was born and raised in Louisville, Kentucky and attended Saint Xavier High School. He completed his undergraduate training at Duke University. He earned his medical school degree at Duke University and received a fellowship grant from the Howard Hughes Medical Institute for his research on joint arthritis in an animal model. He then completed his residency training at Duke University Medical Center. He completed subspecialist fellowship training in foot and ankle surgery at the Foot and Ankle Institute at OrthoCarolina in Charlotte, North Carolina. During this time, he trained with renowned foot and ankle specialist Dr. Robert Anderson and helped care for the Carolina Panthers and Charlotte Bobcats as well as numerous other professional and collegiate athletes.

His wife, Dr. Lauren Lewis, is an obstetrician/gynecologist who has joined the Women's First practice in Louisville. He enjoys golfing, soccer, running, and spending time outdoors and at the lake with his wife and children.



AARON COMPTON, MD

Dr. Compton is an interventional pain management specialist treating individuals with challenging orthopaedic and spine pain conditions. He is board certified in Anesthesiology and Pain Medicine by the American Board of Anesthesiology. He is also a member of several national and regional medical and pain specialty societies. He has authored several publications and presentations on topics of chronic pain. Prior to joining Louisville Orthopaedic Clinic, Dr. Compton served as Medical Director of the Pain Center at Schneck Medical Center in Seymour, Indiana for six years.

Dr. Compton was born and raised in Somerset, Kentucky. He earned his undergraduate degree at Murray State University, and his M.D. from the University of Louisville School of Medicine. He then completed his residency in Anesthesiology at the University of Louisville, receiving honors as the outstanding resident in Pain Medicine. He then completed his fellowship in Pain Medicine at University Hospitals Case Medical Center in Cleveland, Ohio, as Chief Fellow.

Dr. Compton utilizes a multimodal treatment approach to managing pain, with goals of minimizing the need to rely on opioid pain medication (narcotics). He offers numerous minimally invasive procedural options, when appropriate, to restore your function and reduce your pain.



RICHARD "ALEX" SWEET II, MD

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Dr. Alex Sweet specializes in minimally invasive hip and knee reconstructive surgery, including the anterior hip approach for total hip replacement, computer navigated total hip replacement, and minimally invasive total knee replacement. Partial knee replacement and rapid recovery outpatient surgery are also among his area of specialty. Benefitting from the most up to date training available to orthopedic surgeons, Dr. Sweet is skilled in the newest techniques and technology available today.

An accomplished collegiate athlete, swimming for Washington and Lee University, Dr. Sweet was a 17 time All-American, set 7 school records and won the 50 freestyle his senior year in an NCAA record time. After graduating he competed in the 2008 US Olympic Trials in Swimming. He also swam for the University of Louisville during his first year of Medical School where he set 2 school records and again became an All-American.



LORI L. EDMONDS, APRN

Lori is a nurse practitioner working in collaboration with George E. Quill, Jr., M.D., specializing in disorders of the foot and ankle. She graduated magna cum laude from the University of Louisville with a Master's of Science in Nursing in 2005. She also received a Bachelor's of Science in

Nursing from the University of Louisville in 1997.

Lori became board certified by the American Academy of Nurse Practitioners in 2005. She is a member of the American Academy of Nurse Practitioners, The Kentucky Coalition of Nurse Practitioners and Nurse Midwives, and Sigma Theta Tau.



MELISSA T. PARSHALL, MS, PA-C

Melissa is a certified physician assistant specializing in orthopaedics under the supervision of Scott D. Kuiper. She was an athletic trainer during her four years at Hanover College and graduated with a bachelor's degree in Sports Medicine. She worked as research assistant/athletic trainer at Methodist Sports Medicine Clinic in

Indianapolis for three years. She then traveled to New Jersey, where she attended Seton Hall University and received her master's degree in Physician Assistant Studies.

Melissa became board certified by the National Commission of Certification of Physician Assistants in 2005 and has been practicing in orthopaedics. She is a member of the American Academy of Physician Assistants and the Kentucky Academy of Physician Assistants.



KATE S. HAMILTON, PA-C

Kate is a certified physician assistant specializing in orthopaedics under the supervision of Richard A Sweet, M.D. She is from Northern Kentucky, graduating from the University of Kentucky with a B.S. in Dietetics and Physician Assistant Studies.

Prior to her employment with Louisville Orthopaedic Clinic, she had extensive training in the orthopaedic clinic at Fort Knox, KY.

She is a member of the American Academy of Physician Assistants, Kentucky Academy of Physician Assistants, and National Commission on Certification of Physician Assistants.



CARLY O. BELL, PA-C

Carly is a certified physician assistant specializing in orthopaedics under the supervision of Robert A. Goodin, M.D. A former player on the University of Kentucky women's basketball team, Carly served as team captain during the 2009 basketball season. She graduated from the University of

Kentucky with a B.S. in Biology and a M.S. in Physician Assistant Studies with cum laude honors.

Previous to her employment at Louisville Orthopaedic Clinic Carly gained experience through her numerous clinical clerkships within the inpatient and outpatient settings. Throughout her athletic and academic career, she received a number of awards for her community service projects, as well as serving as a leader for many university and athletic committee activities. Carly is a member of the Kentucky Academy of Physicians Assistants (KAPA).



MEGAN COURTNEY, PA-C

Megan is a certified Physician Assistant specializing in orthopaedics under the supervision of Venu Vemuri, D.O. She graduated from the Physician Assistant Program at the Wake Forest School of Medicine in 2011. Not only is Megan a member of the American Academy of

Physician Assistants, but she is also board certified by the National Commission of Certification of Physician Assistants.

While pursuing her undergraduate degree at Northwestern University, Megan worked as a student athletic trainer with all varsity sports. In 2001, she became a certified Athletic Trainer. After finishing a Graduate Assistantship with KORT Physical Therapy, she worked with the Orthopaedic and Sports Medicine department at Duke University in North Carolina. Before going to school to become a certified Physician Assistant, she also served as an Athletic Trainer for the Men's Football and Basketball programs with the United States Military Academy in West Point, NY.

Following her graduation from Physician Assistant school, Megan finally moved back home to Louisville, KY. For the past several years she has been working as a certified Physician Assistant for a local physician office specializing in Gastroenterology.



JEANIE DOAN, APRN

Jeanie is a certified Nurse Practitioner working under the supervision of the Louisville Orthopaedic physicians. She earned her Bachelors of Science degree in Nursing from the University of Phoenix and went on to graduate from Walden University, Baltimore, Maryland with a Master's in Nursing. Jeanie

has an array of experience working in healthcare, treating patients in settings such as the ER, ICU, Med-Surg, Pre-Op, PACU, ambulatory care and beyond.

Jeanie was board certified by the American Academy of Nurse Practitioners in 2014. She is a member of the American Academy of Nurse Practitioners, American Nurses Association, and Sigma Theta Tau, The Honor Society of Nursing.

Jeanie primarily works out of our New Albany, IN clinic location.



REBECCA KOSTYO, APRN

Rebecca is a certified Orthopaedic Nurse Practitioner working in collaboration with Dr. J. Steve Smith who specializes in sports medicine. After earning a Bachelor's of Science in Nursing from Spalding University in 1998, she completed her Master's degree in Nursing from the University of Louisville in 2004.

With over ten years working in orthopaedics specializing in Sports Medicine, treatment of osteoarthritis and total joint arthroplasty; Rebecca brings experience and expertise to the patients of Louisville Orthopaedic Clinic. A native of Louisville, KY, Rebecca gained her education and professional experience learning and working alongside Louisville's medical professionals.

Rebecca became board certified by the American Academy of Nurse Practitioners in 2004. She became an Orthopaedic Certified Nurse Practitioner in 2011. She is a member of the American Academy of Nurse Practitioners and the Kentucky Coalition of Nurse Practitioners and Nurse Midwives.



JORDAN TINNELL, PA-C

Jordan is a certified Physician Assistant specializing in orthopaedics working alongside Ty E. Richardson, M.D. who specializes in Sports Medicine. He is from Louisville and graduated from Centre College where he earned his B.S. in Biology. While attending Centre he was an all-conference

football player and participated on the track & field team. Jordan began his graduate work at the University of Louisville where he earned a Masters of Science degree in Exercise Physiology and then continued at Sullivan University where he earned his 2nd Masters of Science degree in Physician Assistant studies.

Jordan has been a member of Louisville Orthopaedic Clinic since 2007 and has served in various roles in Physical Therapy and Durable Medical Equipment. Prior to becoming a Physician Assistant, Jordan was a high school football coach for 7 years.

Jordan became board certified by the National Commission of Certification of Physician Assistants in 2016 and has been practicing in orthopaedics. He is a member of the American Academy of Physician Assistants (AAPA), the Kentucky Academy of Physician Assistants (KAPA) and the Physician Assistants in Orthopaedic Surgery (PAOS).



KATIE HARRELL, APRN

Katie is a nurse practitioner working in collaboration with Aaron K. Compton, M.D. specializing in treating acute and chronic painful orthopaedic and spine conditions. She graduated Magna Cum laude from Bellarmine University with a Master's of Science in Nursing. She also has a Bachelor's degree of

Science in Nursing from the University of Kentucky 2012 and received her Master's in 2016.

Katie became board certified by the American Academy of Nurse Practitioners in 2016. She is a member of the American Academy of Nurse Practitioners, The Kentucky Coalition of Nurse Practitioners and Nurse midwives, and a member of Sigma Theta Tau.



SARAH B. ZERHUSEN DNP, APRN, NP-C

Sarah is a certified Nurse Practitioner working alongside Madhu R. Yakkanti, M.D. who specializes in the area of hip and knee joint replacements and fracture management. She grew up in Louisville and graduated from Centre College where she earned a B.S. in Biology. While attending Centre, Sarah was

a four time all-conference and all-American honorable mention volleyball player. After graduating from Centre, Sarah obtained a B.S. in Nursing from Bellarmine University. She then completed her graduate degree at the University of Kentucky where she earned a Doctorate of Nursing Practice specializing as a Family Nurse Practitioner.

Previous to her employment at the Louisville Orthopedic Clinic, Sarah gained experience in orthopedics as a staff nurse in the trauma/surgical intensive care unit and outpatient surgery center at the University of Louisville Hospital, where she worked for six years. She also gained experience in medical and pharmaceutical research after serving as a clinical research coordinator for two years.

Sarah became board certified through the American Academy of Nurse Practitioners Certification Board in 2018 and has been practicing in orthopedics. She is a member of the American Academy of Nurse Practitioners (AANP) and was inducted into the Sigma Theta Tau International Honor Society of Nursing in 2011.

MAIN OFFICE LOCATION:

4130 Dutchmans Lane
Louisville, KY 40207
502-897-1794

INDIANA OFFICE:

Northgate Medical Center
3605 Northgate Court, Suite 207
New Albany, IN 47150

www.louortho.com

www.facebook.com/LouisvilleOrthopaedicClinic

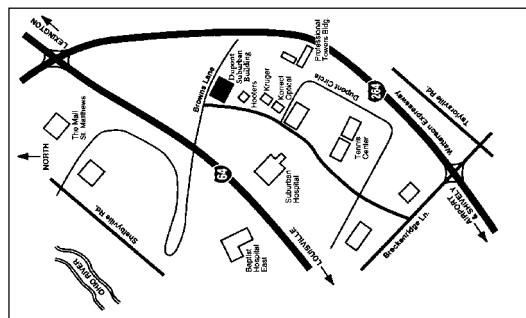
DIRECTIONS

From I-71: Take Watterson Expressway, I-264 West to Breckenridge Lane North, Exit 18B. Turn right onto the first street, Dutchman's Lane. Proceed to end of street.

From I-64: Take Watterson Expressway, I-264 East to Breckenridge Lane North, Exit 18B. Turn right onto the first street, Dutchman's Lane. Proceed to end of street.

From I-65: Take Watterson Expressway, I-264 East to Breckenridge Lane North, Exit 18B. Turn right onto the first street, Dutchman's Lane. Proceed to end of street.

4130 Dutchman's Lane is the last building on the right, the Dupont Suburban Building. Main office is in suite 300. We occupy the entire third floor. Handicapped accessible parking is available in both front and back parking lots. Automatic door entrance is available from the back parking lot.



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Rehabilitation to Home Program

Nazareth Home provides the perfect environment for getting you back on your feet. Rehabilitation is our specialty. Your recovery is our goal.

Our team of physical, occupational and speech therapists are highly trained and experienced in treating a wide range of conditions. We use the most researched and successful therapeutic interventions to reduce pain and inflammation and encourage healing.

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While enrolled in our Rehabilitation to Home program, you will enjoy:

- All private rooms with Wi-Fi accessibility
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Even if you're not a professional athlete, you can be seen by the pros. Baptist Health's sports medicine-trained physicians, therapists and trainers can help you get back in action and perform at your best. We provide complete sports medicine, including performance training, orthopedic surgery, and an advanced facility with private treatment rooms, a gym and an indoor turf field.

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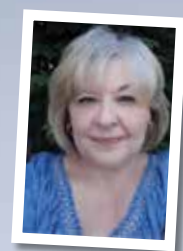
Nancy Berry Walsh

I have been going to Louisville Orthopaedic Clinic for probably 35-40 years for different things. I have seen Dr. Eggers, Dr. Sweet, Dr. Smith and one other that moved back to Tennessee. All were great. I have been seeing them since January 29th because of a fall when I dislocated my shoulder on January 27th. I have been extremely happy with the wonderful care they have provided both in the office and in their Physical Therapy department. Rebecca Kostyo has been the APRN I have been seeing. Dr. Steve Smith did the reverse shoulder replacement surgery. This is the 6th surgery he has done on our family of 4. We have all been extremely satisfied. I highly recommend them.

“MY RESULTS HAVE BEEN AMAZING!”

Cindy Pryor

Dr. Goodin did my knee replacement in 2015. I'm so thankful for his dedication and taking time with me to answer any questions I had. Thank you Dr. Goodin!





Gayle Knop

I am the recipient of two "Sweet Knees" and a shoulder by Dr. J Steve Smith. My results have been amazing. Today I do pretty much everything I want to do.

Sandra Maccaferri

Best group of doctors and staff... professional, knowledgeable, and caring. I have been a patient for many, many years and would never consider any other practice for my needs.

"KNOWLEDGEABLE AND CARING"

Eileen Day

Dr. J. Steve Smith was great. He never pushed surgery, as some surgeons might do, but suggested alternatives to handle pain for rotator cuff problems. Tried PT exercises and finally Cortisone injections until these only helped for a while. Dr. Smith has a very pleasing personality and gives one hope. He helped me through 2 reverse shoulder surgeries plus 2 other surgeries for abscesses that grew on the shoulder incision. I live in New Albany & accommodating me by scheduling at Physicians Medical helped me & family. So glad that Louisville Orthopedic Group chose to have a satellite office in New Albany. I would definitely recommend Dr. Smith for anyone having shoulder problems.



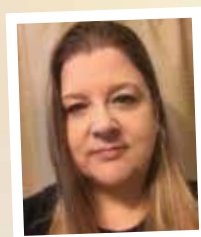
Kathy Gerkins Veith

I had a total left knee replacement on May 10, 2018 and feel wonderful! The physical therapists all say my progress is remarkable. Dr. Richard Sweet is the best! I was up and walking within three hours of surgery. Planning to go back to work at 19 days post-op. *(No walker or cane 2 weeks post-op TKR)*



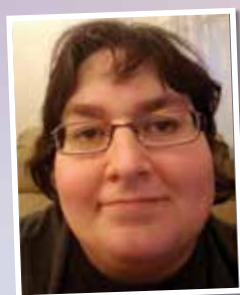
Sara Gahafer

Dr. Richardson is the best! He did shoulder decompression surgery for me many moons ago and has continued to treat me for other shoulder, arm, and back issues since. I would recommend him to anyone!



Kim Major

Dr. Smith did my shoulder 2 years ago and Dr. Lewis did my ankle 4 months ago! I would highly recommend them to anyone! Tim and all the folks in PT are amazing! Thank you all for everything!



Sarah Saylor

I really love the LOC. Dr. Richardson especially because he really helped my knee and shoulder. I had Rotator Cuff surgery July 2017 due to a tear from a bone spur. After surgery he would let me know my progress and ask me if I needed anything such as medication or notes for work. It's just a nice atmosphere. They make sure you understand everything and are able to ask any questions.



Dana Atwell

My experience in your office over the past few months has been wonderful. I tore my gastrocnemius in April of 2017 and saw Dr. Kuiper. He guided me to healing, yet allowing reasonable expectations for a woman who is in love with the gym and working out. My calf eventually healed and I have no residual pain or issues from it.



Post right knee scope with chondroplasty and lateral release.

Fast forward to October 2017 - January 2018 of this year. I have worked with Melissa Parshall, PA-C. As soon as I met her, I felt so comfortable and relaxed. She is so kind and reduced my stress and anxiety all with a giant smile and laugh. I started out with 5 injections in my right knee for pain which eventually led to arthroscopic knee surgery. My knee feels so much better now (two weeks post-op) and I have nothing but good things to say. Melissa answered all my questions even when not on the clock to help me when I had some concerns arise. You have a wonderful PA in Melissa and I would refer your practice to anyone needing your type of services.

“MUCH BETTER QUALITY OF LIFE”



Cheryl Johnson

We have gotten wonderful care from Dr. Richardson, knees and shoulders. Dr. Vemuri, back. And all with the help of Physicians Assistant Megan Courtney. All surgeries end with a

much better quality of life. The office staff gets you in and out “like a well oiled machine”



Debra Culver

Dr. Goodin did a knee replacement that was very complicated in 2008 that gave me my life back.

“I WOULD RECOMMEND LOUISVILLE ORTHOPEDIC TO ANYBODY!”



Karen Gardner

I had rotator cuff surgery done by Dr. Richardson 1 1/2 years ago. He did a great job in which it relieved me from being in a lot of pain. Prior to that I had knee replacement on my right knee done by Dr. Eggers who is now retired. I was up & walking in two weeks. I’m also about to have another knee replacement on my other knee in a couple of days. I can’t wait to get it done by Dr. Goodin. I would recommend Louisville Orthopedic to anybody.



tools for a BETTER PRACTICE

GE's Centricity® Practice Solution

As a medical practitioner, you're constantly balancing two roles: caring for patients and managing administrative issues such as insurance and billing. GE's Centricity Practice Solution combines a comprehensive EMR system with superior practice management software—smoothly integrating both aspects of your practice to save you time and resources.

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- Access to a database of more than 30 million de-identified patient records.
- Automated alerts about drug recalls, test results and other time-sensitive information.
- Reports that benchmark clinical outcomes and document Meaningful Use.
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INCREASE EFFICIENCY AND PROFITABILITY WITH:

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While improving patient outcomes should always be your first priority, no doctor can provide consistent, high-quality care without a reliable system for managing appointments, billing and communication. Centricity PM provides sophisticated task management tools to streamline your workflow. With built-in electronic claims, statements and financial reports, you'll be able to get paid faster and see more patients.

ALL TOGETHER NOW

- Accounting, administrative, financial and scheduling reports.
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- Electronic claims and remittance (EDI).

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Electronic recordkeeping is more than just a mandate — it's the future of U.S. healthcare. Centricity gives you access to GE's Medical Quality Improvement Consortium (MQIC), a database of nearly 30 million de-identified patient records. Using this data, you can benchmark your patient outcomes against the records of your past patients as well as patients in other practices across the country. Combining big data with sharp systems, Centricity EMR makes it easy to meet PQRI reporting requirements and demonstrate Meaningful Use.

POWER IN NUMBERS

Nearly **30 MILLION** patient records are available through MQIC.

More than **18,000** clinicians use Centricity EMR.

Data Hosting

Quatris Health's secure cloud services allow you to enjoy the benefits of Centricity without having to install, configure or maintain your own database. We offer three different data solutions depending on your needs, so you can focus on your practice and leave the technical details to us.

HOSTING YOUR WAY

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Private, local data hosting for those looking for an **ON-SITE SOLUTION**.

Training & Support

When you purchase Centricity through Quatris Health, support comes standard.

IMPLEMENTATION & TRAINING

We introduce your personnel to the software gradually and thoroughly, making the transition as smooth as possible. Once you're up and running, we're just a phone call away, with live customer service available from 7:00 a.m. to 8:00 p.m. EST.

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We offer classes and webinars for new staff just learning the software, as well as sessions designed to introduce existing users to the latest updates and advanced features.



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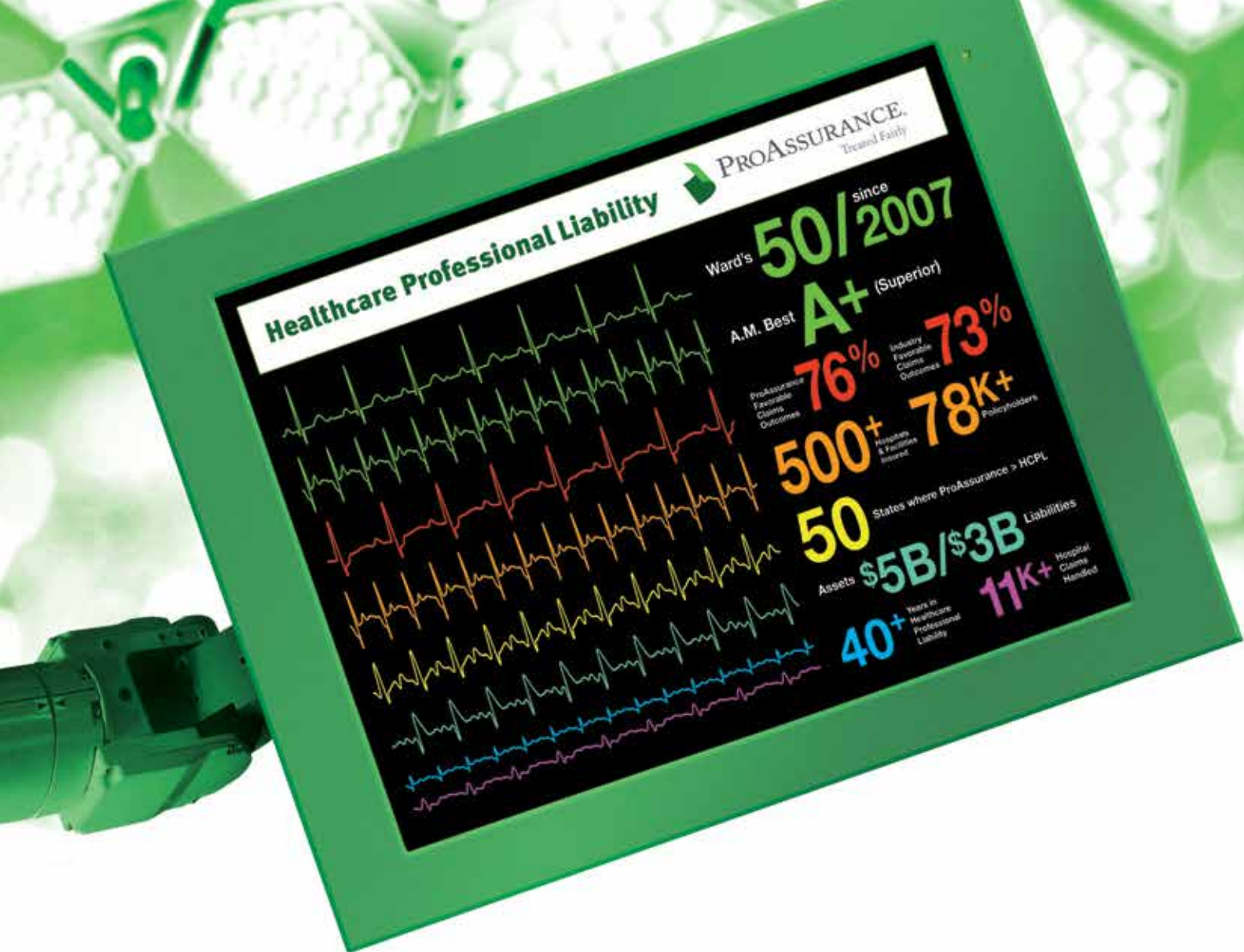
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