

*30th Anniversary*

# HUGHSTON HEALTH ALERT



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1989 - 2018



## Reflections of the Past and Looking Toward the Future

It is fitting on the 30th anniversary of the *Hughston Health Alert* to applaud its success and look forward to its bright future. Over the years, this educational newsletter has been a valuable resource to help patients understand the significance of an active lifestyle while helping bridge the gap between doctor and patient by covering pertinent health topics of interest to our patients. Through the efforts of its staff and contributors as well as the entire Hughston organization, we continue our commitment to our patients and our healthcare partners.

In 1949, when Jack C. Hughston, MD, started his clinic, he built it around core principles dedicated to patient care, which 69 years later still shines brightly. These principles serve as a foundation that supports a vibrant organization with unwavering commitment and compassion for quality patient care.

Dr. Hughston is known as the “Father of Orthopedic Sports Medicine” for his diligent work to elevate the quality of care for the athletes. His favorite team, however, was the one he pioneered to provide comprehensive healthcare to all patients, not just athletes. He incorporated the things he learned from sports medicine into his practice to improve care for all his patients.

Over the years his philosophy, which still guides us all every day, has attracted many young professionals to join and embody this commitment to be the best. The Hughston family has grown from a small office in downtown Columbus to a sprawling north Columbus campus, Jack Hughston Memorial Hospital in Phenix City, Alabama, 30 satellite offices in 6 states, 9 orthopedic trauma clinics in 4 states, over 70 physicians and 850 employees, and most recently, a vibrant orthopedic residency program training young doctors in the Hughston way. We must be doing something right!

The 3 main pillars of Hughston are patient care, research, and education. Dr. Hughston was truly a visionary leader as he taught us to be good stewards of orthopaedic medicine, to be driven and to excel through self-motivation, and to share in his commitment to every patient. Because of his teaching, and his philosophy, every decision this

organization has made has always put the patient first. Research is what truly drives medical improvements, looking critically at problems and solutions. To achieve this, the time commitment involves many unreimbursed evenings and weekends, so it truly requires passion. Education was always one of Dr. Hughston’s true passions; to see the joy he experienced meeting patients, educating them about their problem, and involving them in their own healthcare decisions was a lesson to his team of physicians. Dr. Hughston created the Hughston Foundation to serve as our educational oasis and allow us to share knowledge and inspire us to seek solutions for complex musculoskeletal problems. There was no Internet or Google—just compassion and communication.

To many, this is a time of turmoil in medicine as organizations try to seek direction and formulate plans. At Hughston, there is a sense of calm knowing that the important things we do never change. Political and healthcare leaders in Washington currently are experiencing an epiphany that now quality care is the most important goal. Dr. Hughston already knew that 69 years ago. Therefore, as we look toward the future, we enjoy our work and cherish the experiences we have being a part of the Hughston team, because we know his spirit still leads our charge.

Kurt E. Jacobson, MD, FACS  
President, Hughston Clinic







# Hughston Health Alert

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**Fig.** Minimally invasive spinal surgery technique

## Inside...

- Hughston Orthopaedic Trauma - Filling the Void
- New Developments in Hand Surgery
- Surgical Approaches to Knee and Hip Replacement
- Reflections from Hughston Leadership

## Minimally Invasive Spinal Surgery AT A GLANCE

In the very early days of spine surgery, the surgeon had little more than his or her training, experience, and a scalpel to perform complex and delicate musculoskeletal cases. The traditional surgery was often “invasive,” meaning that the procedure required a sizeable incision, and cutting into muscles to reach the problem area. With damage to the soft tissue, it often took patients months to heal and to return to normal activity. Although the approach to back surgery was invasive and required a long recovery, it was the only option for many people seeking relief from chronic back pain caused by ruptured discs, trauma, tumors, deformities, degenerative disc disease, and infection.

Surgeons perform minimally invasive procedures through tiny incisions instead of a large opening. These procedures, both diagnostic (an exam or test to determine a condition, disease, or illness) and therapeutic (a treatment), have been around for a long time. In 1939, orthopaedic surgeons first performed knee arthroscopy. Since then, minimally invasive procedures have advanced significantly, becoming the mainstay across orthopaedics.

Tubular retractor assembly

Cross section (bird's eye view) of spine, muscles, and surgical retractor

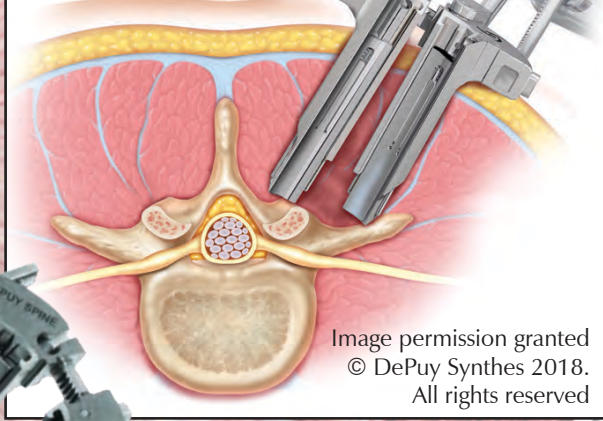


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Top view of incision with retractor

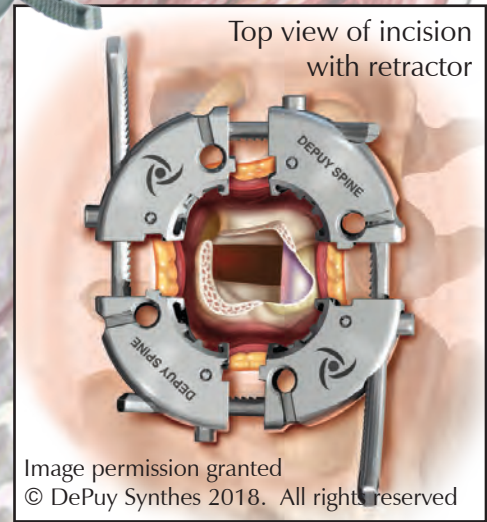
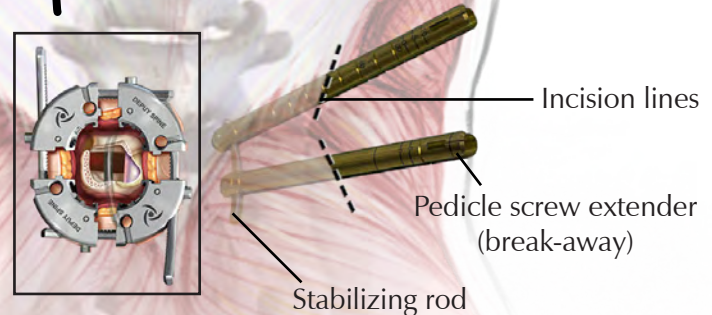


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## Minimally invasive spinal surgery

With traditional open spinal surgery, the surgeon makes a long incision and then retracts, or moves the muscles to the side. Once the muscles are moved, the surgeon can access the spine and remove any diseased or damaged bone or tissue. Then, the surgeon can place bone graft material, cages, rods, or screws as needed. In contrast, the surgeon who practice minimally invasive spinal techniques use tiny incisions and special instruments to perform the surgery (Fig).

Researchers developed less invasive surgical techniques to treat spinal problems with less injury to the muscles and other structures in the spine. Those who perform this specialized surgery are spinal surgeons with additional training in minimally invasive surgery. There are a number of devices and approaches that help the surgeon perform spine surgery. For example, a major drawback of open surgery was the retraction of the muscle, which often caused damage to the soft tissue, resulting in additional pain and healing time. This problem has considerably improved with the use of the tubular retractor.

To do the surgery, the surgeon will make small incisions to reduce blood loss and limit tissue damage, and will use specialized tools and tubular retractors to separate the muscles while performing the operation. The tubular retractor holds the muscles open creating a tunnel to the problem area in the spine. The surgeon accesses the spine using small instruments that fit inside the tubular retractor. Bone or disc material can be removed through the retractor, and the instruments needed for the treatment, such as screws or rods are inserted through the tubular retractor as well. Some surgeries may require more than one retractor. Additionally, fluoroscopy (x-ray that shows real-time moving images) is used as a navigation system to help the surgeon pinpoint the problem with great precision. Fluoroscopy verifies the location of bones, surgical instruments, and implants, as well as soft tissues, such as organs and muscle. Using this technique, the surgeon can perform complex cases in less time and with fewer complications. Collectively, these tools and the skill of a qualified surgeon can successfully treat patients who have various herniated discs, bone spurs, tumors, or other tissues adversely affecting the spine. If the patient needs a spinal fusion, the same tools assist the surgeon in placing rods and screws in place to stabilize the spine.

## The benefits

Patients who undergo minimally invasive spinal fusions typically experience less blood loss, less postoperative pain, a decreased hospital stay, and a faster return to function (Box). Additionally, postoperative infections seem to occur less often after minimally invasive surgery. Furthermore, most patients can walk on the day of surgery with physical therapy assistance and are typically discharged home the following morning. Patients also tend to need less pain

medication and are able to return to the workplace sooner. Moreover, postoperative bracing is much less common, since the patient's own internal brace—his or her own muscles—have been spared.

### Box. Potential Benefits of Minimally Invasive Spine Surgery

- **Less blood loss**
- **Reduced risk of infection**
- **Shorter hospital stay**
- **Less postoperative pain**
- **Less pain medication needed**
- **Faster recovery and return to function**

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## Is it right for you?

Spine surgery is not the first option for treatment of back pain. Physicians typically recommend spine surgery if the exact source of pain can be pinpointed and all other nonsurgical treatments have failed. Nonsurgical care, sometimes called conservative treatments, such as medications, rest, activity modification, and physical therapy should be attempted first, but if these fail to ease the pain, spine surgery may be recommended.

Each patient's condition is unique; therefore, not everyone is a candidate for the minimally invasive approach. Physicians tailor medical treatments to fit each individual based on the patient's diagnosis, overall health, and for those with limiting factors, such as obesity. In these situations, it may be medically advantageous or necessary to perform a traditional open surgery. Ultimately, the goal is to provide back pain relief and the best possible clinical outcome for the patient.

While all surgery has its risks, back surgery today has benefited greatly from the advances in medical technology that now make many of our spinal surgeries minimally invasive. When looking into the future of spine surgery, surgeons feel that the advancements in technology will continue, which means better outcomes for patients.

*Todd C. Bonvallet, MD  
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# Hughston Orthopaedic Trauma

## FILLING THE VOID

Over the last century, general-practice physicians guided our medical care, which evolved into treatment that focused within specific areas of expertise. The generalist, for example, is still pertinent for overall health issues; however, there is far too much knowledge and specific care options available for the generalist to have a required expertise. There is no area more demonstrative of this than the field of orthopaedics. It began as the care of musculoskeletal injured patients, but orthopaedics has evolved into subspecialties that include chronic and acute elements, which further divides into anatomic specific areas. As a result, the care of the multiply injured musculoskeletal patient has fallen into its own subspecialty of expertise—orthopaedic traumatology.

### Trauma

Most of our expertise in traumatology comes from the care of high-energy injuries including high falls, gunshot wounds, and motor vehicle accidents. These injuries are often life or limb threatening or at the very least, life altering. In today's world of seatbelts and airbags, we are experiencing a higher percentage of patients involved in high-energy accidents who survive. Additionally, the results of post-traumatic early care and resuscitation (administering emergency procedures to sustain life) have shown dramatic survival improvements.

### “The golden hour”

Much of the knowledge gained in trauma came from wartime experiences. One example is Dr. R Adam Cowley, who noted that early care within the first hour, in a subset of these traumatically injured patients, could result in higher rates of survival. He called this timeframe, “the golden hour.” From Dr. Cowley's training, experience, and research, he established the R Adams Cowley Shock Trauma Center in Baltimore, Maryland, which saves thousands of lives annually. Again, growing from experience in combat situations, Dr. Cowley realized an aviation component was essential to the speed of delivering care. Even now, when a call comes in the clock starts: the time of injury, time for the helicopter to reach the accident site, and the time the patient reaches the trauma center and into the hands of trauma physicians. It is out of these early origins that trauma care in the United States was developed.

### Trauma centers

With a national need for trauma care, centers grew, but mainly in large metropolitan and university settings. Unfortunately, tragedy often is the impetus of change: An orthopaedic surgeon, Dr. James Styner, was piloting

an aircraft in rural Nebraska when he crashed. His wife was killed and 3 of his children were critically injured. Dr. Styner found inadequate and ill-prepared resources at the small regional hospital where he and a Good Samaritan took his family for treatment. As a result, Dr. Styner influenced the American College of Surgeons to develop advanced trauma life support as an educational foundation for those providing primary trauma evaluations and care nationwide. This additional preparedness enabled more patients to survive through “the golden hour.”

Initially, large level I trauma centers in metropolitan areas were the go-to place for critical care. However, over time limited resources began to change the ability of these centers to support the expertise required. More regionalized centers took an interest, keeping patients closer to home thereby reducing overall cost of care. Many of these regional hospitals did not appreciate the expertise that orthopaedic traumatologists provided and felt their general orthopaedist or other sub-specialized orthopaedist could provide the care necessary for these situations. Over time, the strain of these expectations on these orthopaedic surgeons caused many of them to abandon their exposure to such injured patients. This left a void that needed filling by experts in the treatment of musculoskeletal-injured patients.

### Specialty orthopaedic trauma service

Leaders of the Hughston Clinic recognized this need, and therefore, the Hughston Orthopaedic Trauma service was born. The Hughston Trauma mission is to provide excellent orthopaedic trauma care in underserved areas by operating as a co-management organization. This means that we not only provide the physicians who have the needed expertise; but we also provide administrative staff who help these trauma centers understand and care for their community's musculoskeletal injuries.

Each trauma center is part of a larger system that uses state and local resources, including hospitals and their specialized equipment, physicians, surgeons, healthcare staff, ambulances, helicopters, paramedics, and emergency management teams. Currently, Hughston Trauma employs 17 orthopaedic traumatologists, all of which are fellowship-trained and many are leaders in training other orthopaedic traumatologists. The partner-hospitals are spread from Sanford, Florida to Terre Haute, Indiana with further reaching areas in the works. The Hughston Foundation trains orthopaedic traumatologists through their fellowship program in an effort to continue to fill these needs. The mission of the Hughston Clinic research, education, and patient care exemplifies this endeavor. We hope you never need us, but know that we are here and providing excellent care for those times of tragedy.

*John C.P. Floyd, MD, FACS  
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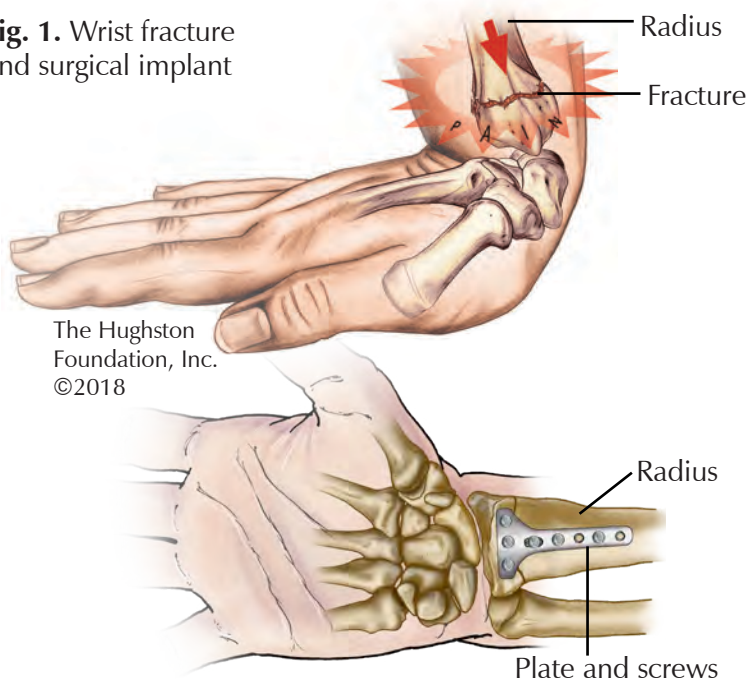
# New Developments in Hand Surgery

The discipline of hand surgery has been around for a very long time with early contributions from such historic figures as the ancient Greek scholars Hippocrates and Galen. While hand surgery in America has evolved, since its formal recognition during World War II, advances in the tools and techniques used by hand surgeons continue to improve and help bring better surgical outcomes for patients.

## Wrist fractures

Affecting both young and old, wrist fractures are some of the more common bony injuries seen in orthopaedics. The injury often refers to a fracture of the end of the radius (larger forearm bone on the thumb side) (**Fig. 1**). The radius has a thin, hard (cortical) outer surface and a porous (cancellous) spongy internal composition, naturally making it weaker on the inside. For the elderly patient, the cancellous bone is often weak and in those with osteoporosis (a disease that causes thin, porous bone) it is even weaker still. Consequently, a fracture can occur with relatively minor trauma in this group of patients.

**Fig. 1.** Wrist fracture and surgical implant



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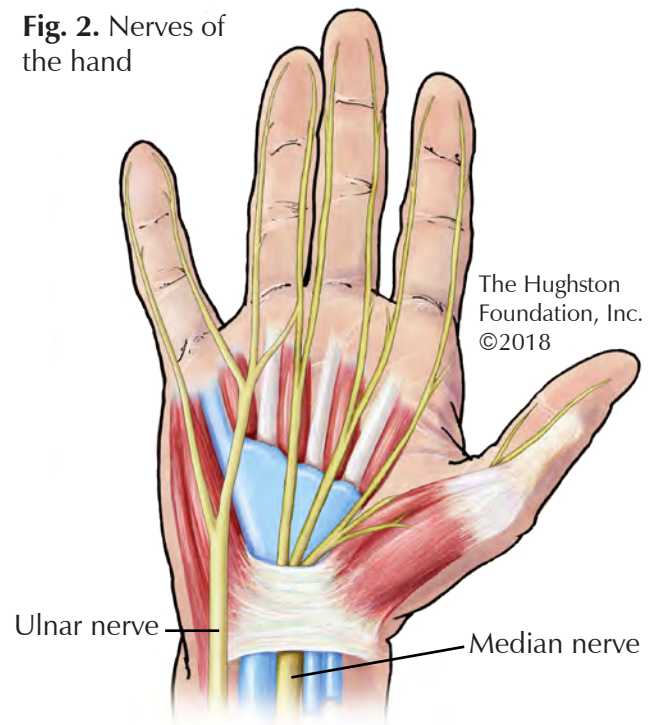
Historically, wrist fractures were treated with casting and nonsurgical methods. Attempts to intervene with surgery were often plagued by poor results and complications. This made the inherent risks outweigh the benefits of surgery in a substantial number of patients with severe fractures. However, the surgical treatment of wrist fractures improved dramatically with the introduction of locking-plate technology. This innovation allows stabilization of the distal radius, by using a plate and an array of screws or pins that secure to the plate. Therefore, it does not rely on the soft bone to secure the hardware. It allows placement of the plate on the palm side of the radius, which decreases the soft tissue complications

and irritation that can occur with implant placement. Additionally, newer designs and materials have resulted in hardware that can be used on the back of the radius as well as the advent of smaller fragment-specific plates to fix common fractures of the distal radius. Patient outcomes have improved as a result of supporting these fractures while allowing for early motion during the healing phase of treatment.

## Nerve injuries

Nerve injuries have always been difficult to treat. The ability of a nerve to heal following injury is limited and the method of injury and timing are critical factors. Improvements in microsurgical techniques led to improved outcomes in nerve injuries of the hand and wrist, with prompt treatment being the key factor. The severed nerve starts to degenerate, or deteriorate following injury and over time becomes irreparable at the zone of the original injury. To stimulate nerve healing, the surgeon must cut away the scarred degenerative nerve tissue until reaching viable tissue. Healing depends on a tension-free repair and minimal distance between the nerve stumps at the site of injury. A significant gap makes this difficult and the results of surgery unpredictable (**Fig. 2**).

**Fig. 2.** Nerves of the hand



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The use of a harvested vein conduit improved outcomes in nerve gaps less than 1 centimeter (cm) in length and the use of an autograft nerve (tissue taken from the patient) improved outcomes in nerve gaps in excess of 1 cm. Both of these techniques can result in persistent symptoms in the area of the harvested tissue. Recently, processed nerve conduits

(artificial) and allograft (graft tissue from a donor) have led to improved outcomes without the negative issues related to harvesting tissue from the patient. The processed donor nerve tissue has shown promising results on larger nerve gaps with results similar to patient harvested nerves. This offers a variety of lengths and diameters providing a better match of the graft to the injured nerve in patients with severe nerve injuries.

**Carpal tunnel**

Carpal tunnel syndrome is pain, numbness, and weakness in the hand due to compression of the median nerve as it passes through a narrow passage on the palm side of the wrist (**Fig. 3**). Patient anatomy, medical issues, or repetitive activity can contribute to the progression of the syndrome. With symptoms occurring both day and night, the patient often complains of numbness in the fingers with the exception of the small finger. Patients report shaking their hand to try to resolve their discomfort and dropping objects held in that hand. Physicians diagnose the condition by obtaining a thorough medical history, a physical exam, and by obtaining a nerve conduction test. This nerve study measures how fast the electrical impulse moves through a nerve.

Managing the condition early with nonsurgical treatments includes observation, activity modification, nighttime bracing, and steroid injections. If these methods fail to control the patient’s symptoms, surgical decompression can provide relief of symptoms in most cases.

The surgery divides the transverse carpal ligament, thereby releasing the compression on the nerve, which allows it to recover. The ligament is a few centimeters long and attaches to bones in the wrist. Traditionally, the surgical incision could range from 4 or 5 cm up to

10+ cm in length and dissect the skin, subcutaneous fat, palmar fascia, muscle tissue, and then the ligament. Newer techniques now allow for less dissection and much smaller incisions. Mini-open techniques employing a 1 cm incision located at the wrist or in the palm have less dissection and disturbance of the overlying tissues while still accomplishing the desired ligament release.

Furthermore, researchers have developed endoscopic techniques that use smaller incisions and involve the placement of a camera underneath the ligament. This

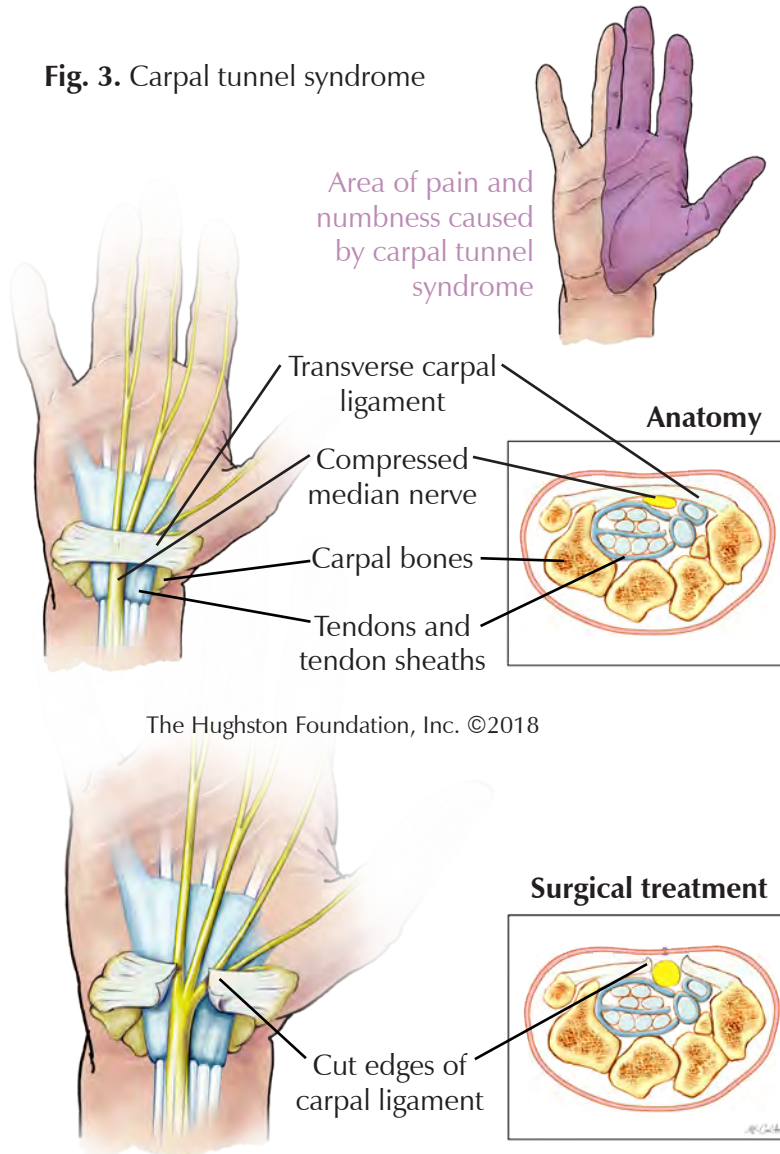
procedure allows the surgeon to release the ligament from below and it greatly minimizes unnecessary dissection of the soft tissue. A recent study comparing patients who had the endoscopic technique to those who had the traditional open surgery indicates that both groups received symptom relief and suffered similar postoperative aches and pains. However, the group who underwent endoscopic surgery had shorter surgical times, less scar tenderness, and experienced earlier return of grip and pinch strength. Mini-open and endoscopic techniques are innovations that have resulted in improved early outcomes for patients who undergo carpal tunnel surgery.

**How far we have come...**

Today, hand surgeons can use open, mini-open or endoscopic techniques

and a range of tools, implants, and grafts to improve surgical outcomes for their patients. The techniques and tools have come a long way since the era of Hippocrates and Galen, which makes one wonder what they would think of our modern surgical methods.

**Fig. 3.** Carpal tunnel syndrome



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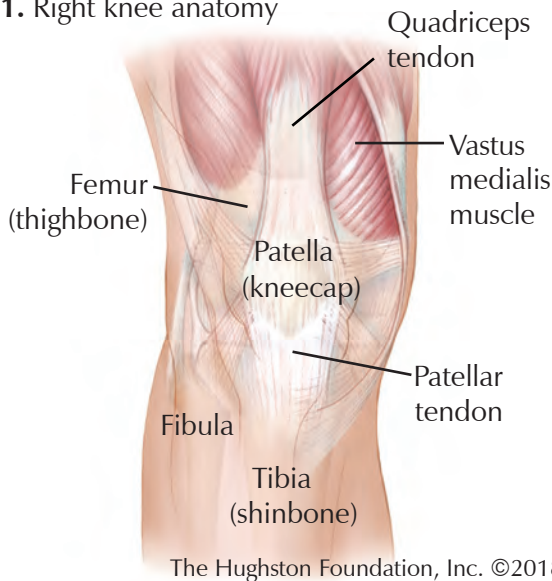


# Surgical Approaches to Knee and Hip Replacement

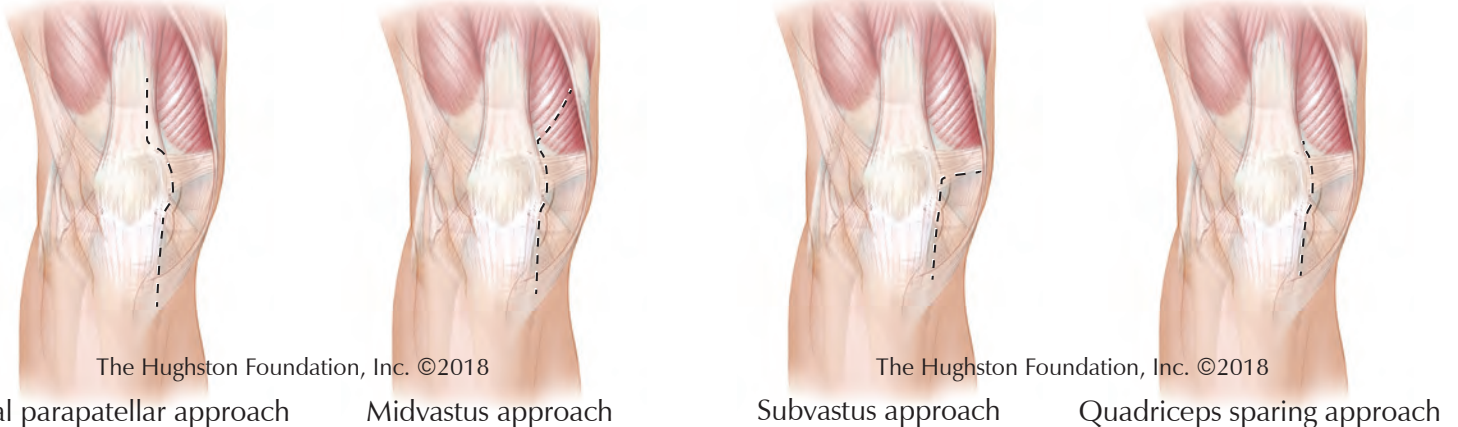
Arthritis and rheumatic conditions are a leading cause of disability among adults in the United States. Almost 50% of Americans, 65-years-old and older have been diagnosed with arthritis. As baby boomers age, the number of people who will need treatment for knee and hip arthritis is expected to skyrocket. Many will consider total knee and total hip arthroplasty (joint replacement) to alleviate their symptoms.

Over the years, orthopedic surgeons have refined the surgical approaches used in knee and hip arthroplasty. The goal of the surgical approach is to gain enough exposure (allows access and visualization of the bone) to complete the surgery while minimizing the effects to the surrounding tissues. Improvements in both technique and instruments have allowed us to minimize injury to the muscles and tendons (connects muscles to bones). With a trend towards shorter hospital stays, and even outpatient surgery, we continue to look for new ways to speed recovery after surgery.

**Fig. 1.** Right knee anatomy



**Fig. 2.** Surgical approaches to the knee. Dotted line shows incisions on the right knee.



Each surgical approach has its advantages and disadvantages; but how your surgeon performs your surgery often depends on his or her own preference, your overall health, and health history (Figs. 1, 2 & 3). For example, if you have arthritis, if you are thin or obese, if you have damaged your knee or hip joint in the past, or if you smoke—your surgeon considers all of these factors and more before surgery.

## Surgical approaches to the knee

### Medial parapatellar approach

For many years, this approach has been the standard incision for orthopedic surgeons. The medial parapatellar incision descends down and around the patella (kneecap), offering the best view of the joint. The disadvantages, however, include cutting into the quadriceps tendon, which then requires repairing, and during the procedure the patella is flipped over, sometimes stretching the knee tendons in the process.

### Midvastus approach

First described by Gerald A. Engh, MD, and colleagues in 1997, the midvastus approach is a variation of the medial parapatellar approach that does not cut the quadriceps tendon. Instead, this incision splits the vastus medialis muscle and requires repair and healing of the muscle fibers. Depending on the surgeon, the patella may be flipped during this approach.

### Subvastus approach

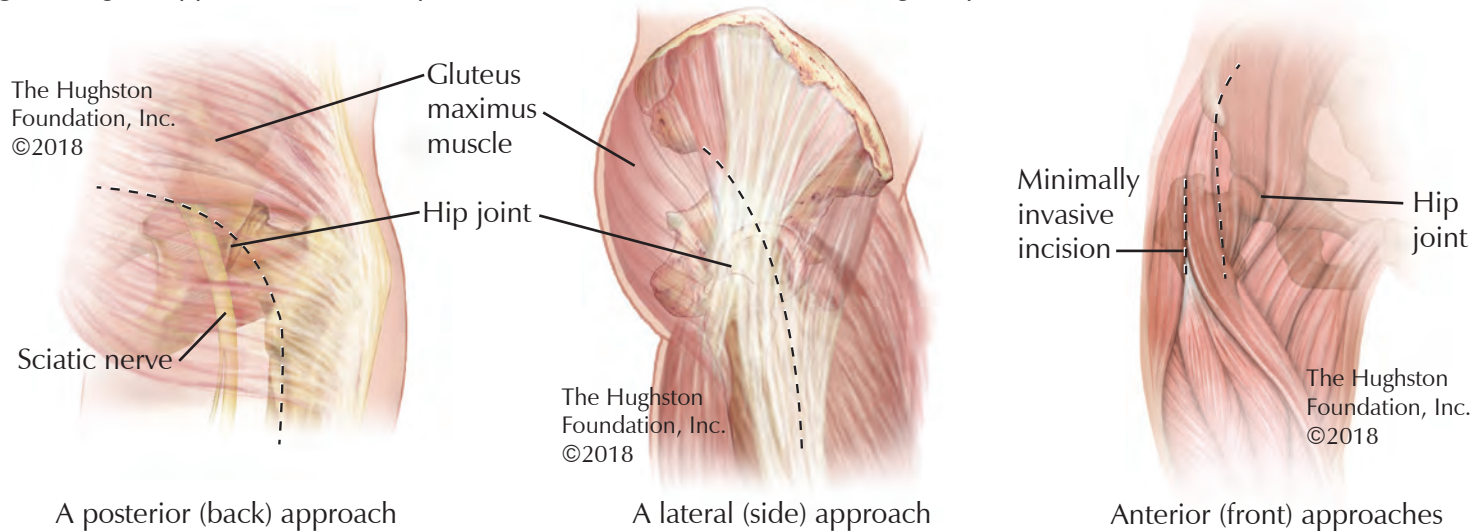
The subvastus approach, which is a L-shaped incision below the vastus medialis muscle actually elevates the muscle instead of cutting into it and this procedure also avoids flipping the patella. A drawback, however, is that patients who are obese, or who have limited range of motion may not be good candidates for this approach. Additionally, since the surgeon elevates the muscle, this approach may be difficult for patients who are muscular with a large vastus medialis muscle.

### Quadriceps sparing approach

This is the most minimally invasive approach since it completely preserves the quadriceps tendon and its muscle attachments and there is less tendon stretching since the kneecap is not flipped. The disadvantages are that it provides the least exposure for the surgeon and some studies have demonstrated an increased complication rate.



**Fig. 3.** Surgical approaches to the hip. Dotted line shows incisions on the right hip.



## Surgical approaches to the hip

### Posterior approach

The posterior (back) approach is the most common surgical approach used for total hip replacement worldwide. Surgeons perform this procedure with the patient lying on their side. The posterior approach involves splitting the gluteus maximus muscle in line with the muscle fibers and the short external rotator muscles (muscles that allow outward rotation of the hip) are detached either completely or partially and then repaired at the end of the surgery. Surgeons prefer this approach because it offers an extensile (stretched or open) exposure that provides an excellent view of the femur (thighbone). The disadvantages include a slightly higher dislocation (comes out of socket) rate and a muscle-splitting approach.

### Direct lateral approach

The modern direct lateral (side) approach was popularized by orthopaedic surgeon, Kevin Hardinge in 1982. It is the second most common surgical approach for total hip arthroplasty used worldwide. Surgeons perform the surgery with the patient on either the side or supine (face up). Similar to the posterior approach, the direct lateral approach involves splitting the gluteus maximus muscle and a portion of the gluteus medius muscle (muscle that stabilizes the hip while standing) for good exposure for the surgeon. Advantages of the direct lateral approach include the lowest dislocation rate among the most popular approaches and an excellent view of the acetabulum (socket). The major disadvantages of this approach are a significant incidence of limp and abductor (movement away from the body) muscle weakness.

### Direct anterior approach

Dr. Marcus Smith-Petersen first described the anterior approach to the hip in 1917, when physicians primarily used it for reducing congenital (at birth) hip dislocations.

In recent years, this approach has regained popularity with modifications to the original procedure and the development of new instruments specifically used for anterior hip arthroplasty. It is now the third most common surgical approach used for total hip replacement worldwide. This approach is truly intermuscular and internervous. In other words, surgeons do not cut or split major muscles and they navigate between nerves. The advantages of the direct anterior approach are a low dislocation rate with a muscle-sparing approach, which means faster soft-tissue healing. The disadvantages of this approach are a lack of exposure of the femur and some studies have suggested an increased fracture risk.

### Newer approaches

More recently, surgeons have developed the supercapsular percutaneously-assisted total hip, or SuperPATH approach and the direct superior approach. Both of these approaches are variations of the posterior approach, but with smaller incisions and less soft tissue damage that are meant to improve postoperative recovery. The SuperPATH also avoids dislocation of the hip during the procedure.

### Which is the right approach?

Surgeons have successfully performed knee and hip arthroplasty using a variety of approaches for many years now and these surgeries have been tremendously successful for treating patients with disabling arthritis. Each surgical approach has advantages and disadvantages and the scientific evidence has not demonstrated a superior approach for any procedure. When considering surgery, the patient's overall health and lifestyle, along with the surgeon's experience are paramount in making the best decision on the approach to use.

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# Hughston Health Alert

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The *Hughston Health Alert* was awarded the Grand Award in the 2017 APEX Awards for Publication Excellence for the Summer 2016 issue in the Newsletter category. The APEX Awards for Publication Excellence is an annual international competition that recognizes outstanding publications from newsletters and magazines to annual reports, brochures, and Web sites.

The *Hughston Health Alert* has placed every year since 2002 in this competition.

## Reflections from Hughston Leadership

As we celebrate the 30th anniversary of the *Hughston Health Alert*, and near the 70th anniversary of the Hughston Clinic, we see reflections of Dr. Hughston's vision become an ever-growing, ever-changing success story.

Starting in 1949 with a one-man orthopaedic clinic, Dr. Hughston recruited and trained talented surgeons to work with him. Today, the Hughston organization has over 70 physicians and 30 clinic locations in 6 states. There have been many new developments in the healthcare industry, and Hughston has not faltered in meeting those challenges. Unlike other organizations, Hughston surgeons are owners, and for that reason, they are very dynamic and open to growth. Their willingness to change has allowed us to play a national role, molding the direction of healthcare. Bringing the provider and business structure together is something unique, and it is "why and how" we have experienced exponential growth. In just the past few years alone, we have doubled our size with physicians and clinics and our expansion continues nationwide.

Other components of the Hughston organization continue to prosper and reach strategic milestones: the award winning, Jack Hughston Memorial Hospital is celebrating its 10th year as a leader in surgical treatment and patient satisfaction; the Hughston Foundation, in its 50th year, continues to educate and train the nation's top orthopaedic surgeons; and Hughston Trauma, achieves new benchmarks year after year.

We have board-certified, fellowship-trained surgeons—some of the best and well known in the country—and with these physicians we pair an orthopaedic-specialized team of healthcare professionals. This team, our business leadership, and state-of-the-art facilities allow us to provide care to our patients like no other. The achievements of the Hughston organization demonstrate what is possible when original ideas for orthopaedic research, education, and training materialize through individuals with vision and drive.

Mark Baker, CEO

*Hughston Clinic & Jack Hughston Memorial Hospital*

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## Jack Hughston Memorial Hospital Residency Program

In keeping with the spirit of Dr. Hughston's vision of education, research and treatment, we launched the Jack Hughston Memorial Hospital Orthopedic Residency Program in July 2015. Based out of the Jack Hughston Memorial Hospital and with academic affiliations at the Edward A. Via College of Osteopathic Medicine (VCOM) on the Auburn University campus, the program began with first- and second-year classes consisting of 3 residents per year. The American Osteopathic Association (AOA) was the accrediting body for the program. Under the direction of the Designated Institutional Official (DIO) Fred Flandry, MD, FACS; Director of Medical Education (DME), Robert H. Harris, MD; and Program Directors David H. MacDonald, DO, FAOAO, and Jesse L. Pace, DO, the residency has quickly become one of the more competitive orthopaedic programs in the country.

With more than 20 fellowship-trained orthopaedic surgeons at the main Hughston Clinic and with the Jack Hughston Memorial Hospital serving at the core, along with our associate healthcare staff, the program is ideal for training residents. The current clinical rotations for patient care occur at the Jack Hughston Memorial Hospital, Midtown Medical Center (a level 2 trauma center), Egleston Children's Hospital in Atlanta for pediatric orthopaedic rotation, and the Surgery Center at the Hughston Clinic. Each year, the program has more than 12,000 orthopaedic cases treated within the core and the other clinical site rotations. Timothy S. Oswald, MD, and his partners at Pediatric Orthopedics of Atlanta direct the pediatric orthopaedic rotation. Additional primary care and surgical staff help round out the first-year residents' experience at the various clinical facilities surrounding Columbus, Georgia.

The Hughston Foundation serves as the center for orthopaedic research, academics, and training. With more than 80,000 sq. ft. of lecture halls, a library, a surgical educational center (with a dry lab for saw bones and a wet lab for cadaver labs), and medical illustration, medical writing, and videography capabilities, the Foundation continues to be one of the top facilities dedicated to these goals. Additionally, collaborating with VCOM at Auburn University, we have strengthened the program of basic science and benchtop research along with capabilities to do animal and biomechanical studies within the various schools of Auburn University.

As for the program's success over the past few years, the Jack Hughston Memorial Hospital Orthopedic Residency Program has selected and matched its top choices for resident applicants and the residents have performed well on the Orthopaedics In-training Exam (OITE). Additionally, the residents have presented at local and national meetings each year, and one group in particular won first place for diagnostic and management problem solving at the Enneking Seminar in Musculoskeletal Pathology in 2016. Recently, our senior resident was selected at his top choice for fellowship in adult reconstruction in Greenville, South Carolina.

With the recent combination of the ACGME and AOA accreditation boards, the program is undergoing the transition to ACGME standards. Under the direction of the Dr. Flandry, the Jack Hughston Memorial Hospital was credentialed as an ACGME facility with accommodations. Dr. Flandry (DIO) will continue to lead the program and Dr. Harris and Dr. MacDonald will serve as the program directors. Renee Thomason is the residency coordinator and she has the assistance of the administrative staff of the hospital as well.

During the process of transitioning to ACGME, we will be changing the pediatric orthopaedic rotation to 6 months at Medical College of Georgia in Augusta. The Children's Hospital is co-located with the level I trauma center and will allow for learning interactions for our junior orthopaedic residents with residents from pediatrics, general surgery, and internal medicine. In addition, it strengthens the academic interaction, research potential, and caseload experience for our program. The Jack Hughston Memorial Hospital Orthopedic Residency Program represents the next phase in the legacy of Dr. Jack Hughston's goals—education, research and treatment.

*Robert H. Harris, MD  
Jack Hughston Memorial Hospital Residency Program*





# Hughston Health Alert

The Hughston Foundation, Inc.  
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## 30 Years of Service

When I was first asked to participate on the Editorial Board of the *Hughston Health Alert*, I was young and somewhat intimidated by the cast of characters who were to work on the publication. With the support and encouragement of my friend and mentor Steve Hunter, MD, and his enthusiasm for the project and interest in what I was doing, I took my seat at the table determined to give it my best.

Dr. Hughston had the concept of the “whole-person healing” process that I’m sure developed from his polio patients’ rehabilitation, in which he felt was as important as the surgeon’s work. For this reason, many of our articles in the beginning were centered around “total wellness” as it related to the injured athlete. Because of my work in the public health sector and fitness, I saw where good medical information was lacking in that area. Therefore, we covered other health issues besides orthopaedic topics; and I like to feel I was behind the idea of that endeavor.

From publications like the *Hughston Health Alert* to the concept of “whole person healing,” the Hughston Foundation remains the backbone of the Hughston organization. The sharing of knowledge through research and publishing has continued over the past 30 years, just as Dr. Hughston planned.

*William C. Etchison, MS*  
*Director of Hughston Health and Industrial Medicine*

## The Hughston Athletic Training Program

Since its inception, the Hughston Athletic Training Fellowship Program has served as an invaluable asset to Columbus, GA, and the surrounding Chattahoochee Valley. Initially created in 1998 to fulfill the need of local high schools in terms of both highly qualified teachers and affordable athletic healthcare providers, the program has continued to grow and evolve. Over the years, the fellows have provided high-level care at major sporting events in the community.

In 2010, the program became the official sports medicine provider of the Muscogee County School District. Additionally, the program continues to offer weekly high school injury clinics every Saturday during the fall, to help with providing low-cost preparticipation physical examinations, and to administer computerized baseline concussion testing to local high school students.

Thirteen fellows currently provide care to 8 Muscogee County high schools, as well as Harris County High School, Calvary Christian School, Chattahoochee Valley Community College, and Columbus State University. Beyond daily coverage at these local institutions, our athletic training fellows also attend the University of North Georgia (online) to earn a Master of Science in Physical Education degree. Overall, the goal of the program is to create well-prepared athletic trainers to serve in various settings.

We are very proud of this program and its accomplishments throughout the past 2 decades.

*Andy Grubbs, MEd, ATC; Chuck Robinson, ATC, NREMT; and Yao Zheng, ATC*  
*Hughston Athletic Training Fellowship Program Director and Athletic Trainers*