

# M.D. NEWS

## Special Feature



### The Region's Largest Orthopaedic Group — Full of Leading Specialists — Isn't Done Growing

*Leading the Future in Orthopaedics and Physical Therapy*

By Alison Johnson

Meet a medical practice that's big and small — comprehensive and specialized — at the same time.

Atlantic Orthopaedic Specialists has brought together a group of physicians who can treat all injuries, diseases and abnormalities of the musculoskeletal system, from head to toe. At the same time, each doctor has a highly focused area of expertise and training.

As a result, the practice can combine the latest treatments and technology with personalized care and quick access for the approximately 350 patients seen daily. Physicians can achieve the best and fastest possible outcomes for patients of all ages, aided by an in-house pain management program that includes medication, injections and rehabilitation.



**Dr. Byrd explains a scoliosis procedure.**

“We can consult each other for second opinions and facilitate referrals, so patients receive the best care from one of our doctors. No doctor here feels pressured to try to take care of a problem outside his or her area of super-specialized expertise within orthopaedics. The model we have truly offers the best, most complete patient care.”

“When a case gets complicated, we send it to the person with the most experience and training in that area,” said Dr. Colin W. Hamilton, a spine

surgeon. “For patients, that’s invaluable.”

The doctors also take advantage of every tool available through a bigger practice, from internal quality control studies to annual patient satisfaction surveys. Physicians and physical therapists have quick access to patients information due to the recent addition of an electronic medical records system.

Most doctors are fellowship trained, active in medical research and development and serve as members of national and regional health boards. Dr. Donald A. O’Neill, the group’s Medical Director, draws from his broad experience in the academic, public and private practice sectors and serves as its administrative conduit on many issues, such as HIPAA, EMR, quality assurance and coding adherence. Dr. Paul N. Krop, currently serving on the Board of Councilors of the American Academy of Orthopaedic Surgeons, helps to keep the practice well informed on the latest orthopaedic issues by sharing feedback with the group from recently attended meetings.

Atlantic Orthopaedic Specialists has grown into the region’s largest orthopaedic group. The practice has 19 doctors — 17 orthopaedists and two pain specialists — 150 total staff members and eight specialty areas.



**Drs. Schaffer (shown) and Markham serve as team physicians for the Norfolk Tides.**

PHOTO BY MARSHALL D. HOYLE

## Joint Replacement Specialists



**Thomas C. Markham, M.D.**  
Also specializes in spine.



**John M. Morina, M.D.**  
Also specializes in sports medicine.



**Donald A. O'Neill, M.D.**  
Joint replacement consults and general orthopaedics.



**G. Raymond Payne III, M.D.**  
Also specializes in sports medicine.

The subspecialties are spine/scoliosis, sports medicine, hand/up-per extremity, joint replacement, foot/ankle, trauma/fractures, general orthopaedics and physiatry. The practice also offers full orthopaedic radiology services, physical therapy and a workers' compensation program.

Atlantic Orthopaedic Specialists is geographically diverse, too. The practice has four clinical sites, two in Norfolk and two in Virginia Beach. The office on Camelot Drive in Virginia Beach also is home to a physical therapy center, and the group has a second PT office in Norfolk. Patients come in from all over Hampton Roads, as well as the Eastern Shore and northeastern North Carolina.

Outside the office, doctors participate in community outreach projects throughout the region. Those range from teaching students at Eastern Virginia Medical School to serving as team physicians for the Norfolk Tides and Old Dominion University's athletic program (slogan: Where Every Patient Is Treated Like a Pro!). The practice also sponsors a widely attended annual conference on worker's compensation issues.

And Atlantic Orthopaedic Specialists is not done growing. The group plans to open another clinical site in the Princess Anne area of Virginia Beach by fall and would like to add several more doctors to its roster.

### A RICH LOCAL HISTORY

Atlantic Orthopaedic Specialists got its start all the way back in 1920, when Dr. Foy Vann brought

the practice of orthopaedic surgery to the Tidewater area. Vann's son, Dr. John A. Vann, joined his father's Norfolk practice in 1947. The group then grew to 15 doctors, and in 1973, a professional corporation replaced the partnership organization. The corporation's name became Vann Orthopaedic Associates, P.C., in 1984.

Meanwhile, two more medical pioneers, Dr. Frank G. Burns and Dr. James L. Gardner, joined forces in 1964 to establish the first orthopaedic practice in Virginia Beach. Under the leadership of Robert W. Waddell, M.D., that group incorporated as Virginia Beach Orthopaedic Associates, Inc. in 1970 and grew to 13 doctors.

The current practice was born from a 1998 merger between those two groups, each of which had absorbed many talented local doctors along the way. The long history has given the practice a strong foothold in the region.

"We have the largest geographical coverage in the area," Dr. Byrd said. "We've grown up with all of the hospital systems here, and have good relationships with referring physicians and with employers."

The practice has a long list of specialized procedures and the latest equipment to help patients, some of which Atlantic Orthopaedic Specialists' own doctors have developed.

Highlights within the subspecialties include:

**Joint Replacement.** As people live longer and stay active into their senior years, doctors want to give them replacement joints that won't fail over time. Two newer weapons are a computer navigation system used during surgery and alternative bearing surfaces in artificial joints.

The computer system acts almost like a Global Positioning System, allowing doctors to use infrared cameras to precisely map a patient's bony anatomy. That improves joint alignment to within three degrees, compared to five to eight degrees of error with traditional instruments.

"We know a malaligned joint — a knee, for example — will fail over time," said Dr. G. Raymond Payne III, a joint replacement and sports medicine specialist. "With better alignment, that same implant is less likely to come loose."

Replacement joint bearings traditionally have been metal-on-plastic. Over time, however, the plastic breaks down, particularly in young



**Dr. Payne (left) and Dr. Morina consulting on a patient's X-ray.**

and athletic patients. The body's immune system then attacks the microscopic wear particles as foreign bodies, which can damage bone around the implant and cause bone cysts. Some patients need a second surgery to correct the problems.

Two newer alternatives are ceramic-on-ceramic and metal-on-metal joints. There are no long-term patient studies yet, but simulator tests show less wear with those combinations. So while Dr. Payne sticks with the well-tested metal-on-plastic joints for elderly patients, he presents all options to his younger patients.

"We know it's a tough thing for someone young and active to have revision surgery," he said. "We want to help them choose a joint that is going to hold up well and not slow them down."

Partial knee replacement is another option for patients with arthritis in just one knee. Dr.

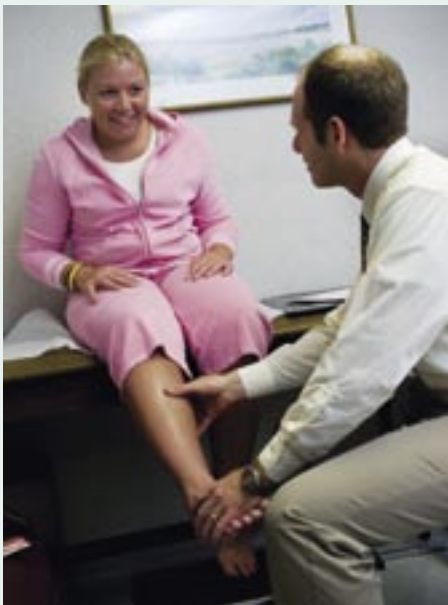
Thomas Meade Jr., a veteran joint replacement specialist, has performed about 30 such operations over the past four years. The technique, called the Repicci II Unicondylar Program, restores a third of the joint surface, but leaves the rest as the patient's own functioning tissue. As a result, patients recover much faster and with a better range of motion.

"It really preserves a lot of the patient's own bone," said Dr. Meade, who has been with Atlantic Orthopaedic Specialists for 26 years. "We try especially hard to leave hard bone under the tibia to help support the implant. I've seen no failures so far."

Most patients are in the hospital only one night and back to work in four weeks, compared to about three months of recovery time for a total knee replacement. For patients who do need a total replacement, Dr. Meade also performs minimally invasive hip and knee surgeries.

Atlantic Orthopaedic Specialists' joint replacement team also includes the specialized skills of Drs. Thomas Markham, John Morina, Wilford Gibson and Mark Bewley.

**Returning an athlete to competition as quickly as possible is the goal of Dr. Bewley.**



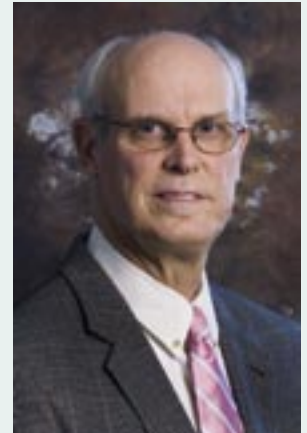
## Sports Medicine Specialists



**Mark A. Bewley, M.D.**  
Also specializes in joint replacement and general orthopaedics.



**Wilford K. Gibson, M.D.**  
Also specializes in joint replacement, trauma/fractures and general orthopaedics.



**Thomas S. Meade Jr., M.D.**  
Also specializes in joint replacement.



**John J. Schaffer, M.D.**



**Lawrence E. Donato, Jr., D.O.**

**Sports Medicine.** The department prides itself on providing timely and accurate diagnostic care with effective and cutting-edge treatments. Each doctor oversees aggressive rehabilitation programs needed to return athletes to competition as quickly as possible.

"We see injured patients ranging in age and skill levels

from little leaguers to professional level athletes," said Dr. John J. Schaffer, a sports medicine specialist. "Our physicians have long established relationships with many local high schools, special interest organizations and colleges, such as Old Dominion University, as well as the Norfolk Tides."

In fact, Atlantic Orthopaedic Specialists' doctors regularly attend home games for the Tides and ODU, which fields 14 different teams for men and women. The sports medicine physicians staff all of the practice's offices and are available for appointments every weekday.

"We want to be right there to meet people's needs," Dr. Payne said. "Fast response can make a tremendous difference with an acute injury."

Drs. Meade and Schaffer perform the latest techniques in arthroscopic shoulder surgery, including arthroscopic rotator cuff repairs and labral repairs. This technique permits faster recovery from surgery and quicker return of function.

Drs. Gibson, Morina and Bewley round out the team with their expertise in sports medicine. This summer, Dr. Lawrence E. Donato, currently in his sports medicine fellowship, will be joining the group.

**Hand, Wrist and Upper Extremity.** For about a decade, Dr. Samuel C. Kline has performed endoscopic surgery for carpal tunnel syndrome, or compression of the median nerve at wrist level. Symptoms often are

## Hand, Wrist and Upper Extremity Specialists



Samuel C. Kline, M.D.



Paul N. Krop, M.D.  
Also specializes in General Orthopaedics.



Chad R. Manke, M.D.

worse in people whose work requires rapid, repetitive bending of the fingers or use of vibratory tools, and women over 30 are at particular risk.

Many of Dr. Kline's patients complain of numbness, tingling and pain in their fingers, wrists and forearms. During carpal tunnel surgery — one of the most common operations in the country — he and other specialists divide the carpal ligament to reduce pressure on the median nerve.

The difference with an endoscopic approach is that the incision is only about half a centimeter long, compared to four to eight centimeters during open surgery. Dr. Kline also operates through an incision in the crease of the wrist rather than in the palm.

Patients are under regional anesthesia and often can return to normal daily activities just a few days after surgery. They also experience less swelling and pain.

Drs. Manke, Krop and Kline are also working with new innovative technology for early stabilization of wrist fractures. This new technology allows both young and older patients a more rapid return of wrist and finger function after wrist injuries. Often patients do not need to be in a cast with these new treatment alternatives.

**Foot and Ankle.** Atlantic Orthopaedic Specialists' doctors treat everything, from newborn foot deformities, to sports injuries, to complications from diabetes. Whenever possible, they perform procedures arthroscopically to reduce pain and recovery time for patients.

"We're doing surgeries on an outpatient basis that used to require a couple of days in the hospital," said Dr. J. Alexandra Dale, a foot and



During a follow-up visit after surgery, Dr. Manke examines a patient's hand.

ankle specialist. "There's a paucity of foot and ankle specialists in this area, but our practice has good coverage of all aspects."

One of Dr. Dale's specialties is the Ponseti Method for treating clubfoot, a common birth defect that occurs in approximately one to two per 1,000 live births. The foot is twisted in and down, so that without treatment, people appear to walk on their ankles or the sides of their feet.

The Ponseti Method is an alternative to traditional surgical treatments. With gentle massage and manipulation of the clubfoot, doctors can extend the contracted tissues and apply a cast to maintain the correction. After approximately seven days, the muscles and ligaments will have stretched enough to make further correction possible.

**Dr. Dale teaches a student from Eastern Virginia Medical School.**



## Foot and Ankle Specialists



J. Alexandra Dale, M.D.

Doctors then remove the cast and repeat the same process of gentle massage and manipulation, usually at one-week intervals for approximately six weeks.

“Not only do you avoid surgery for these babies, but you also get better functional results,” Dr. Dale said. “You see children with much less stiffness.”

**Spine Surgery.** Studies have shown that low back pain is the second most common reason for patients to seek a doctor’s care, trailing only colds. Common conditions seen at the practice include disc herniations, spinal stenosis, scoliosis, kyphosis, fractures and tumors. Doctors are well-versed in the latest medical breakthroughs, including various decompression techniques, pedicle screw placement and other instrumentation techniques, anterior and posterior fusion techniques and kyphoplasty.

To strengthen the spine specialty even further, the group is developing The Virginia Spine and Scoliosis Center within the practice. “It’s just such an evolving field,” Dr. Byrd said, “and we are dedicated to evolving right along with it.” The center performs more than 550 spine cases a year, and is dedicated to the latest techniques in spinal care. One of these is a spinal implant called the Vanguard Cage — recently highlighted on the ABC show “Miracle Workers” — developed and patented by Dr. Byrd. The titanium cage, an anterior lumbar fusion device, won FDA approval in 2003 and allows surgeons to stabilize and fuse the spine without the need for more invasive posterior procedures.

Dr. Hamilton offers an operation called kyphoplasty for vertebral compression fractures due to osteoporosis. The procedure involves inserting two balloons into vertebral bodies, expanding the space, deflating the balloons and injecting a liquid cement that hardens in a few minutes. The cement is thin enough to place accurately in the body without high-pressure instruments.

People who have been in terrible pain usually feel better within a day or two, said Dr. Hamilton, who has performed close to 100 kyphoplasties over the past three years. Because he can operate with local anesthesia, the surgery is safe, even for elderly patients.

“These are people who have been miserable, sometimes for months, and they start feeling better almost right away,” he said. “It’s remarkable.”

Minimally invasive surgery on the back and neck allows for smaller incisions, less dissection and lower morbidity. For some younger patients with lower back pain from degenerative disc disease, new disc replacement devices also are an alternative to spinal fusion surgery. The Charite prosthesis system — two endplates made of high-quality cobalt chromium alloy with a polyethylene sliding core — is designed to replicate normal movement, much like total knee and hip replacement joints.

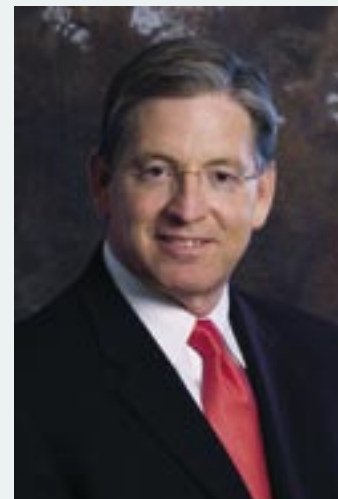
“This is one of the early stages of spinal reconstruction, with improved function and a reduced pain level being everyone’s goal,” said Dr. David M. Clifford, who counts reconstruction of the neck as one of his specialty areas. “In theory, you should be able to reduce the amount of force on adjacent disk levels and keep problems from jumping to another level of the spine.”

The Virginia Spine and Scoliosis Center, complemented by Drs. Timothy Budorick and Thomas Markham, is dedicated to providing each one of its patients with the combined benefit of a multidisciplinary, consultative approach in the treatment and care of their spinal condition. “The Center is a response on our part to provide a service to both patients and referring physicians,” Dr. Budorick said.

## Spine Specialists



Timothy E. Budorick, M.D.



J. Abbott Byrd III, M.D.



David M. Clifford, M.D.



Colin W. Hamilton, M.D.  
Also specializes in general orthopaedics.

“There are numerous choices to consider when selecting among treatment options for patients, and no patient is necessarily right for all of these. It can be very difficult to determine where to begin for both patients and nonspinal physicians. Our goal is to work toward a ‘one-stop’ option, in order to provide as many options as possible under one roof. We want to make things easier for our patients and referral sources — to access the right care for them.”

**Trauma and Fracture Care.** Dr. Gibson, whose work includes repairing fractures, straightening crooked bones and reconstructing arthritic joints, also embraces new technologies and techniques. In addition to the new ceramic bearing surfaces for artificial joints, he repairs fractures and deformed bones through small incisions using less invasive subcutaneous and sub-muscular plating techniques and intramedullary rods. The young patient with post-traumatic arthritis now has durable options that will hopefully last a lifetime.

Ceramic and metal joint surfaces with variable size femoral heads will address many of the problems that have plagued earlier joint replacements in the young patient following hip trauma. Dr. Gibson has performed hip

## Pain Management and Rehabilitation Specialists



JoAnn W. Dervay, M.D.



Eric A. Mein, M.D.

surgeries in Hampton Roads for greater than 10 years, and is pleased with his very low complication rate. "I attribute the very low dislocation rate to a modified anterior-lateral approach. Over the past two years, I have been doing the hip replacements routinely through a 10- to 12-centimeter incision. Preserving the posterior capsule and repairing the anterior capsule with the minimally invasive technique has been very successful."

**Physical Therapy and Pain Management.** With locations in Norfolk and Virginia Beach, the team includes licensed physical therapists, physical therapy assistants, occupational therapists, a work hardening specialist and a certified disability examiner. Everyone works together to return injured patients to their active lifestyles.



Dr. Dervay works with a patient during a nerve conduction study.

Atlantic Orthopaedic Specialists has invested in the latest diagnostic and treatment tools, including functional capacity testing equipment. The practice also offers impairment rating, ergonomic job analysis and physical employment testing. "We're very attuned to technology and how we can use it to facilitate patient care," Dr. Byrd said.

Having a physical therapy program integrated into the practice is a benefit for patients, doctors say. "There is better communication if there's a problem," Dr. Payne said. "They can come right over and tell us about it, as well as brief us on a patient's progress."

And physical therapists also work closely with the group's two physiatrists, Drs. Eric Mein and JoAnn Dervay. The practice's pain management specialists — whose philosophy is to look at each patient as a whole person, not just an injury — can choose from a wide range of tools and treatments to find the best fit.

**Workers' Compensation.** Atlantic Orthopaedic Specialists has a dedicated program that includes two specialists whose full-time job is

responding to any questions and concerns. The goal is to provide timely and efficient patient care, which will allow the injured worker to return to work as soon as it is safe to do so.

Whenever possible, the staff schedules patients by the next business day. They file work-status reports after each appointment as part of an effort to nurture a collaborative relationship between patients, employers, carriers, adjusters and rehabilitation nurses.

"We have high standards of individualized care and aggressive treatment plans," Dr. Byrd said. "We want to restore maximal patient functionality, and we want the process to be as smooth as possible."

The program is so respected that more than 80 workers' compensation nurses and risk managers for local businesses usually attend the annual Atlantic Orthopaedic Specialists' Rehabilitation Professionals Workers' Compensation Conference. The conference, held in May, is a full-day event at which doctors give short lectures and lead question-and-answer sessions to educate the audience on anatomy, injuries and the latest surgical procedures. Participants receive Continuing Education credit upon completing the program.

Topics for the 2006 gathering, scheduled for May, include cervical disc herniations, occupational back pain, acute nerve injuries, splinting techniques and crush injuries of the foot.

## INTO THE FUTURE

As noted earlier, Atlantic Orthopaedic Specialists is not done growing.

Aiming to improve access for patients even further, the practice recently signed a lease on a new 10,000-square-foot office at Princess Anne Park in Virginia Beach, which should open by fall. That site will better serve patients from Southern Virginia Beach and Chesapeake, and also will feature digital radiology and physical therapy.

Atlantic Orthopaedic Specialists also hopes to grow its roster of doctors by adding four or five new specialists. Possible areas of expansion include sports medicine, joint replacement, foot and ankle and physiatry.

Count on one thing, Dr. Byrd said: Any new doctor will be just as dedicated to high-quality care — the big picture and the small details — as the members of today's group.

"We don't just want to keep up with everything that's happening in medicine," he said. "We want to constantly move ahead." ■



*Leading the Future in Orthopaedics and Physical Therapy*

*Main Phone: (757) 321-3300*

*Doctor-to-Doctor: (757) 321-3341*

*www.atlanticortho.com.*

*1800 Camelot Drive, Suite 300, Virginia Beach*

*844 Kempsville Road, Suite 101, Norfolk*

*160 Kingsley Lane, Suite 405, Norfolk*

*4501 N. Witchduck Road, Virginia Beach*

*1975 Glen Mitchell Drive, Suite 200, Virginia Beach (opening late 2006)*

*The practice accepts most major insurance plans.*