

A past president of the Association of Bone and Joint Surgeons, Edward McFarland specializes in the treatment of shoulder and elbow injuries.

Shouldering Ten Years of rTSA

Over 500 patients have opted for the reverse total shoulder arthroplasty (rTSA) at The Johns Hopkins Hospital over the last decade. “We have become experienced with how to use it, when to use it and how to make it successful,” says **Edward McFarland**, director of the Division of Shoulder Surgery.

Unlike a traditional shoulder replacement, which mimics how the ball and socket are naturally situated in the shoulder, the rTSA installs the ball prosthesis on the socket side of the joint and the socket prosthesis on the ball side of the joint. Although rTSA is typically recommended for patients who have a damaged rotator cuff with arthritis, McFarland says the surgery can also help those who have rotator cuff damage—pseudoparalysis—but no arthritis. “The rTSA prosthesis allows them to regain all or some of their range of motion,” he says. “Some patients have really great results after the operation.”

The reverse replacement is also finding use in place of a hemiarthroplasty to restore the ball part of the joint. “The hemi surgery didn’t work very well over the years,” says McFarland, “but a reverse in the same population has been pretty successful in addressing pain from arthritis.”

For patients with significant bone loss, McFarland can perform the rTSA without having to do a bone graft in the socket, as is required with a traditional replacement. This is a significant advantage because bone grafting around a regular replacement has high failure rates.

Other situations in which an rTSA can be used successfully are for failed standard shoulder replacements when the failure is due to rotator cuff tears, dislocation or instability of the replacement, or infection. The rTSA has been utilized successfully in patients with rheumatoid arthritis, psoriatic arthritis, shoulder dysplasia and after shoulder fractures.

In the past, the operation was recommended only for patients age 70 and older. McFarland’s experience, however, shows it can be successful in those under 70 as well. “We’ve found it beneficial for patients from their 60s all the way into their early 90s,” he says. “It has a lot of versatility, is good for a variety of conditions and is a great advancement in the field of shoulder surgery.” ■

“The rTSA prosthesis allows patients to **regain all or some of their range of motion**. Some patients have really great results after the operation ... We’ve found it beneficial for patients **from their 60s all the way into their early 90s.**”

Q&A

with A. Jay Khanna

OVER THE COURSE OF ALMOST 20 YEARS at Johns Hopkins, spine surgeon A. Jay Khanna has charted a path in the Department of Orthopaedic Surgery that melds clinical expertise with business and

professional development skills. In 2008, while maintaining a busy clinical practice and meeting academic demands, he earned an MBA at the Johns Hopkins Carey Business School. Since then, Khanna, division chief of Johns Hopkins Orthopaedic Surgery in the National Capital Region, has participated in leadership programs and conferences sponsored by the American Academy of Orthopaedic Surgeons, among other organizations, and plans to share with his colleagues the lessons of those programs and his experiences. He now serves as vice chair of professional development for the Johns Hopkins Department of Orthopaedic Surgery and works closely with Department Director James Ficke to design and deliver the new professional development program. To this new role, Khanna brings a philosophy that aims to help faculty stay on track toward academic promotion while juggling their many clinical, teaching and research responsibilities.



How do you define professional development, and how does it fit into the practice of orthopaedic surgery?

I see it as a pathway from academic training to the development of a successful clinical practice and, for those of us in academic practice, the integration of teaching and research. The goal is to help build the regional, national and international reputation of our department and university.

Like other surgical specialists, orthopaedic surgeons need a deep understanding of clinical diagnosis, technical execution, specialty care and potential complications. Managing a busy clinical practice is time-consuming and increasingly frustrating, especially with the many new constraints—financial and otherwise—facing physicians and health care systems.

One of the goals of our professional development program is to provide resources that will help each of our 50-plus orthopaedic surgery faculty members advance their careers while paying close attention to the need for work-life balance. We have a very strong, experienced and accomplished faculty, and we aim to continue to retain, develop and recruit the best physicians and scientists in the country, which will allow us to provide the best possible care to the patients who choose a Johns Hopkins orthopaedic surgeon.

How do you foster professional development?

Our goal is to help our faculty achieve their personal and professional goals, including those related to advancement along the Johns Hopkins promotion pathway. As with individuals in any profession, our faculty members have varying objectives with regard to the balance between their professional and personal aspirations and with regard to the amount of time they would like to allocate to the clinical, teaching and research aspects of their careers.

There are many resources available at Johns Hopkins and through our various professional societies and organizations, such as traveling fellowships, advanced degrees such as an MBA or MPH; and mentorship at the department, university and national levels. In addition, we have been collaborating with the Johns Hopkins Office of Faculty Development, which offers many resources for all Hopkins faculty.

This summer, we are launching a departmental professional development lecture series that will feature weekly presentations on such topics as the academic promotion process and how to navigate it, executive coaching, how faculty members can focus on the research component of their careers and other topics of expressed interest to our faculty.

How has the response been so far?

Quite favorable. A few months ago, we invited our faculty to submit their curriculum vitae to a group of senior faculty and members of the Departmental Promotion Committee to assess how they were doing professionally and to provide feedback. Eighteen of our physicians and scientists submitted their CVs, and the group provided formal feedback on their readiness for academic promotion and how they might consider directing their clinical, research and teaching efforts to achieve the greatest impact at the institutional, regional and national levels. The response was quite positive, and other faculty members have already started submitting their CVs for the next review cycle.

What might surprise people about your efforts?

That we take a personal interest in promoting our surgeons and scientists and in helping them achieve their goals and aspirations, whatever the arena. That they are never alone in trying to figure it all out. It's one of our biggest strengths. ■

After Orthopaedic Trauma: Healing Nonunions and Malunions

Last weekend, **Greg Osgood** operated on a woman who was struck by a bus and had three fractures in her pelvis and hip—a challenging procedure but not unusual for the chief of adult trauma surgery in Johns Hopkins' Department of Orthopaedic Surgery.

Yesterday, however, Osgood consulted with a man who had fractured his arm playing sports 15 years ago and now wants surgery to restore his arm to normal length. Osgood is one of four Johns Hopkins trauma surgeons who address not only acute traumatic injuries but the aftermath for patients treated many years before.

After surgery to treat an acute injury, over time the bones may not heal correctly or may not heal at all. An infection can live at the site of surgery for years without a patient's knowing it. The results can affect the patient's ability to walk, work or perform daily activities because of

the related pain or limited function.

These patients may consult with a number of medical professionals but get turned away because their situation seems too complex or outside the scope of a certain practitioner's experience, says Osgood. "It's not really trauma anymore, but it is a significant problem. Often, people don't know who to send these patients to."

Osgood's team can address nonunions and malunions from months to decades after the original injury. First, the team conducts an evaluation with X-rays, CT scans and laboratory studies to assess a patient's situation, including whether the bone is infected. Then the options are provided and if surgery is recommended, the team can promptly begin the reconstruction process.

For the patient who suffered a fracture while playing sports 15 years ago, Osgood will combine two to three operations to per-

form an osteotomy to cut, realign and then regrow the bone. For another patient who was hit by a car while running three years ago, Osgood performed several operations. The patient then underwent rehab and physical therapy so he could run again.

Even though Osgood's specialty is orthopedic surgery, he says it doesn't mean he will always recommend an operation. "There are things we can do without surgery and still have the injury healed," he says. These include casting, splinting and bracing.

"Not everyone wants to tackle the problems that come from trauma," says Osgood. "The injuries are challenging and have a higher failure rate, but I enjoy the complex problems and trying to help patients regain their function and return to their activities." ■



Among Greg Osgood's areas of expertise is evaluating and treating patients with poorly healed trauma injuries.

Osgood is one of four Johns Hopkins trauma surgeons who address **not only acute traumatic injuries** but the **aftermath** for patients treated many years before.

OUTCOMES RESEARCH

More Patient Input, Better Spine Outcomes

Not long ago, researchers measured spine surgery outcomes based on technical expertise, fusion rates, deformity correction and equipment failure. But that only told half the story, says health services researcher **Richard Skolasky**, an associate professor of orthopaedic surgery and director of The Johns Hopkins Hospital's Spine Outcomes Research Center. "Patients," he says, "are the experts in their own experience." Yet despite a greater focus on patient-reported outcomes measures in recent years, attempts to identify factors that influence patient satisfaction have been limited, says Skolasky, "so we need to identify the domains that are most important to patients and find ways to make their assessment a part of clinical care."

The challenge, he notes, is doing so without being disruptive and burdensome to patients and providers. To that end, Skolasky, who holds degrees in health policy management and experimental psychology, has launched a pilot study in the Johns Hopkins



The goal of Richard Skolasky's research is to help surgeons and patients speak the same outcomes language.

spine clinic and continually seeks ways to engage patients in their care.

Informed by questionnaire responses from an earlier study on spine outcomes, Skolasky and his colleagues assembled a data collection process that involves asking patients about pain, disability, function, depression and anxiety. Questions include: "Are you anxious about surgery?" and "How confident

are you that you'll be able to participate in physical therapy after surgery?"

Skolasky is finding that patients appreciate the opportunity to stop and gather their thoughts. Spinal dysfunction, he says, is not only a complex medical condition, it's a complex health care process that involves primary care, a surgeon and a physical therapist. Following method standards, Skolasky and colleagues use the NIH-developed Patient-Reported Outcome Measurement Information System (PROMIS) to assess the patient's state of well-being, suffering and function before and after major operations. He envisions putting touch-screen tablets in waiting rooms to capture data and return results in real time.

So far, the data collection has been used primarily for research purposes. The next step, says Skolasky, is to put that data into clinicians' and patients' hands to encourage conversation about treatment and recovery. Ideally, he says, physicians should identify beforehand what patients hope to get out of the surgery and compare those expectations with the level of medically anticipated improvement—and possible barriers.

Most surgeons, adds Skolasky, "don't want to proceed if the patient's expectations aren't realistic." Having a conversation about expected outcomes, he says, "will put everyone in a good standing for surgery." ■

Mark Your Calendar

Orthopaedic Essentials for the Pediatric Office

Saturday, October 11, 2014

7:15 a.m. to 4 p.m.

The Johns Hopkins Hospital
Baltimore, Maryland

This course addresses common pediatric musculoskeletal conditions and provides a forum to discuss office management and referral criteria in order to enhance the care of the pediatric patient locally. Small group educational sessions are offered to address the educational needs of the target audience.

To register: hopkinscme.edu or 410-502-9635

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This newsletter is one of the many ways we seek to enhance our partnership with our thousands of referring physicians. Comments, questions and thoughts on topics you would like to see covered in upcoming issues are always welcome.

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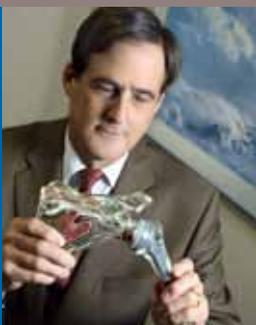
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