Global Health Initiative

In January, a team of attending staff and fellows from the Department of Anesthesiology, Critical Care and Pain Management at HSS traveled to Ghana to provide regional anesthesia training to communities, with an emphasis on ultrasound-guided regional anesthesia. Global Health Initiative, led by HSS anesthesiologist Swetha Pakala, MD, is an outreach mission dedicated to advancing regional anesthesia care among the global community.

“Our focus is to educate anesthesia providers on regional anesthesia because it has a huge role abroad,” says Dr. Pakala. “Regional anesthesia allows for surgery in austere environments with limited resources, and improves postoperative pain control.”

While there are many surgical mission trips aimed at improving standards of care in global communities, Global Health Initiative differs in a major way: It focuses on providing sustainable medical education and training. “Rather than going to these communities and providing anesthesia ourselves, we can teach local anesthesia providers how to do spinals, epidurals, and nerve blocks. This way, they can learn to do surgeries without ventilators and other expensive technology, which is often limited in these environments,” says Dr. Pakala.

“Regional anesthesia to “numb” the surgical site generally produces fewer changes in breathing and blood pressure, and is considered a safer alternative to general anesthesia for orthopaedic surgery under these circumstances,” says Mark Brouillette, MD, 2017-2018 Regional Anesthesiology & Acute Pain Medicine Fellow. Each year, beginning in 2014, a designated Fellow’s Global Outreach clinical elective focuses on teaching and studying care in limited resource settings.

In January 2018, the Global Regional Anesthesia Curriculum Engagement program was introduced at Komfo Anokye Teaching Hospital (KATH) in Kumasi, Ghana to systematically design, implement, and measure changes associated with teaching. “During the three-week program in January, KATH physicians rapidly acquired skills to perform ultrasound-guided peripheral nerve blocks for upper and lower limb cases,” says Dr. Brouillette.
In a letter to the Department of Anesthesiology, Critical Care and Pain Management, Akwasi Antwi-Kusi, MD, head of the Anesthesia Department at KATH, expressed his gratitude: “At KATH, we see an unusually high number of traumas and our anesthesia equipment for general anesthesia is not up to standard, so the option of regional anesthesia is not only better for our costs, but for our patients’ well-being. Our surgeons greatly appreciate the improvement in skills we have learned from the HSS staff. We now feel much more confident in our abilities to care for our patients.”

Global Health Initiative, which was launched by Dr. Pakala in 2012, has also collaborated with local communities in Uganda, India, and Vietnam. To determine the impact of the initiative’s longest-running program in Ho Chi Minh City, Vietnam, the Department of Anesthesiology, Critical Care and Pain Management performed outcomes studies. Anesthesia providers in Vietnam reported performing 10-15 blocks each day in 2017, compared with 1-5 blocks per day in 2011. Also, 100 percent of participants in Vietnam reported being comfortable to teach ultrasound-guided skills to other clinicians following the education program.

Hospital Alvorada: Transforming Its Patient Care Approach

For the past four years Hospital Alvorada, a general hospital in São Paulo, Brazil, has collaborated with HSS to transform its patient care approach.

As a result, Hospital Alvorada, an HSS Global Orthopaedic Alliance Member, has differentiated itself within its regional healthcare market. “Learning from HSS was a paradigm shift in our culture,” says Osvaldo Pires, MD, orthopaedic surgeon at Hospital Alvorada. “The partnership helped the hospital establish itself as a center of excellence in hip and knee arthroplasty in São Paulo and in Brazil.”

With the ongoing guidance of HSS, Hospital Alvorada has optimized its quality and outcomes both clinically and operationally. Areas of focus include orthopaedic surgery, operational excellence, nursing, operating room efficiency, quality and patient safety, rehabilitation, and strategic guidance and leadership. Team members from each area have played a key role in the success of this multidisciplinary initiative. “What we now understand,” says Dr. Pires, “is that the hospital and surgeons can be partners in the delivery of healthcare to reach the common goal of improving outcomes and efficiency.”

Hospital Alvorada’s surgical volume and operational efficiency have increased concurrently, and the hospital’s surgical infection rate has decreased. Clinical protocols were established to maintain this high level of quality.

Prior to 2014, Hospital Alvorada performed, on average, 10 knee arthroplasty cases per month. Following 2017, and after partnering with HSS, Hospital Alvorada performs approximately 22 knee arthroplasty cases per month. Over the course of three years, Hospital Alvorada observed a 30 percent increase in orthopaedic volume. Continuous training focused on operating room staff improved efficiency so that now, length of stay for total hip replacement (THR) and total knee replacement (TKR) decreased by 16 percent and 24 percent respectively. Although rehabilitation was not typically initiated on the day of surgery, now 80 percent of all THR and TKR patients at Hospital Alvorada are seen on day of surgery. As a result of the HSS partnership, Hospital Alvorada placed a new administrative team that helped the hospital achieve International Joint Commission Accreditation.

HSS Stavros Niarchos Foundation Orthopaedic Education Program

Since 2006, the Stavros Niarchos Foundation has supported the advancement of knowledge and skills of Greek orthopaedic surgeons through a partnership with HSS. At the 11th Annual HSS Stavros Niarchos Orthopaedic Seminar Program, entitled “Complex Primary Total Knee and Hip Replacement,” HSS welcomed 15 Greek orthopaedic surgeons and a former HSS-SNF Fellow. For two days, 10 faculty members presented didactic lectures, surgical videos with commentary, and case presentations. Participants also engaged in cadaveric training in the Bioskills Education Laboratory and operating room observation with Adult Reconstruction and Joint Replacement faculty. They also attended the 29th Annual Holiday Knee & Hip Course, a symposium focused on the latest techniques and innovations in complex primary total hip and knee replacement.

In 2017, with continued support from the Stavros Niarchos Foundation, HSS launched the HSS Stavros Niarchos Foundation Academic Visitor Program. HSS hosted four Greek orthopaedic surgeons, each for a two-month period, in which they observed surgeons from a variety of specialties. Since the inception of the HSS Stavros Niarchos Foundation Orthopaedic Education Program, 90 Greek orthopaedic surgeons have improved their knowledge and taken their skills back to Greece.
HSS China Arthroplasty & Spine Symposium

The annual HSS-China Symposium was held in Zhuhai, China on November 14 in partnership with HSS China academic partners Peking University People’s Hospital (PKU), Peking University Third Hospital, Peking Union Medical College Hospital (PUMC), and Guangzhou Provincial Traditional Chinese Medicine Hospital (GPTCM). The symposium highlighted Arthroplasty and Spine components. The HSS-PKU-PUMC Arthroplasty Symposium, whose focus was Complex Primary Knee, was chaired by Mathias Bostrom, MD, along with Michael Cross, MD; Seth Jerabek, MD; and Peter Sculco, MD. The program chair of the HSS-PKU-GPTCM Spine Symposium, Han Jo Kim, MD, along with Sheeraz Qureshi, MD, presented topics on degenerative/deformity of the cervical and lumbar spine. More than 250 orthopaedic surgeons attended the annual symposium.

Also in Zhuhai, China, during the 12th International Congress of Chinese Orthopaedic Association (COA), Douglas Padgett, MD, program chair of the COA-HSS Arthroplasty Session, along with Drs. Cross, Jerabek and Peter Sculco, presented a course on Complex Primary Hip on November 15. More than 500 Chinese surgeons attended the course, which included didactic lectures and case discussions.

Ranawat Orthopaedic Conference

To educate and share knowledge of the field of joint replacement surgery, several HSS surgeons participated in the 16th Winter Meeting of the Ranawat Orthopaedic Conference (ROC) in Mumbai, India. This year’s conference, which took place from January 4-6, focused on “Advances & Techniques in Joint Replacement Surgery & Arthroscopy.” During the three-day meeting, nearly 1,000 orthopaedic surgeons from around India attended sports- and arthroplasty-focused educational sessions, which were also live streamed to another 2,000 people. The meeting was chaired by Chitranjan Ranawat, MD, along with Anil Ranawat, MD, and Amar Ranawat, MD. Michael Cross, MD, and Peter Fabricant, MD, MPH, gave presentations and moderated sessions.

During the meeting former fellows who trained at HSS under Dr. Chitranjan Ranawat met and presented him with feedback. This unique opportunity provided insight into the work Dr. Chitranjan Ranawat has done over the years to share his knowledge and educate others around the world. Many of the fellows he has trained are now leading surgeons throughout India.

International Society of Orthopaedic Centers

The International Society of Orthopaedic Centers (ISOC) held its 8th Conference in Sydney, Australia November 15-18, 2017. Mater Hospital hosted the conference, “From Good to Great Through Innovation.” ISOC’s 21 centers of excellence from 17 countries gathered to discuss cutting-edge orthopaedic topics ranging from basic science to surgical techniques in spine, shoulder, trauma, and arthroplasty. Physicians and CEOs also met for several combined sessions, which included conversations about value, disruptive innovation, care, and the physician scientist. This unique program provided an opportunity for all members to learn from each other and explore ways to improve their institutions. The 9th ISOC conference will be held May 16-18, 2019 in Lund, Sweden, and will be hosted by Skåne University Hospital.
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