

Clinical UpdateCompliments of
John Muir Health

Physician News

SERVICE LINE SPOTLIGHT:

Spine Services

John Muir Health's comprehensive spine program helps those experiencing back or neck problems resulting from injury, illness, or wear and tear to the spine. The patient-centered focus is important for each individual, whether they arrive with a herniated disk or a spinal fracture. The outcome goal for each patient is the very highest level of independence and physical ability. JMHPN got updates from several of the physicians in the program, including Terence Chen, MD, Jason Cheng, MD, Steve Lee, MD, and Maxwell Merkow, MD. Read on for their input:

JMHPN: What are some of the recent noteworthy developments in your department?

Steve Lee, MD: Developments include a continuing emphasis on patient-centered care, reducing complication rates, more efficient in-hospital surgery and recovery protocols, and proper "informed consent" prior to surgery. The Spine Quality Committee meets every other month and addresses key issues for patient-centered spine care.

Jason Cheng, MD: John Muir Health spine surgery outcome data is now reported to the American College of Surgeons' National Surgical Quality Improvement Program® (NSQIP.) This demonstrates our interest in tracking our outcomes and improving care.

Terence Chen, MD: A small group from John Muir Health traveled to Portland, Oregon recently to tour the Oregon Health Sciences surgical theater, where an intra-operative MRI (IMRI) is used. Participants included Linda Womack, Executive Director of Imaging Services, Carole Inlaw, RN, David Hong, MD and myself. An extensive IMRI 3-year project was developed at Oregon Health Sciences University. The John Muir Health team was very impressed with the workflow, usage, quality and safety competencies, and this provides us with information for consideration of this technology at John Muir Health.

Of what are you most proud?

Steve Lee, MD: I'm most proud of the development and continued collaboration with the pre-operative clinic to assess patients pre-surgery and help to reduce complications related to surgery. The result has been the dramatic decrease in both complications and length of stay of all spine surgery performed at the hospital.

Jason Cheng, MD: I'm proud of working with a group of talented people to build an outstanding spine surgery program that addresses our community of spine patients' needs. Also, of supporting our primary care physicians and providing top-quality spine care with access in our community.



A site visit to Banner Health in Arizona enabled our staff to see the BodyTom - a portable full body CT scanner used in the operating room. John Muir Health recently approved and acquired this technology.

What do you wish other John Muir Health MDs knew about your department?

Steve Lee, MD: John Muir Health has a talented group of spine surgeons who are up to date on the latest techniques and technology. Our surgeons are in the orthopaedic surgery department and the neurosurgical department.

Terence Chen, MD: We offer a full spectrum of spine services at John Muir Health from minimally invasive to the most complex problems. Our pediatric spine program is growing with the addition of our PICU.

Jason Cheng, MD: Technology plays a key role in spine surgery, and in techniques such as minimally invasive spine surgery (MIS). We had a recent site visit to Banner Health in Arizona to see the BodyTom® portable, full-body, 32-slice CT (computed tomography) scanner, which John Muir Health recently approved and acquired. This is used in the operating room. The value of MIS is a shorter surgery time, reduction of occurrences where the patient might return to the OR, lower length of stay in the hospital and faster return to work and lifestyle with the same long term outcomes.

Some of the most common spinal problems include:

- Fractures
- Herniated disks
- Sciatica
- Scoliosis
- Spinal stenosis
- Sprains
- Osteoporosis
- Cervical and Lumbar radiculopathy
- Spinal tumor
- Spondylolisthesis

Maxwell Merkow, MD: The BodyTom intraoperative CT scanner improves both the scope of surgeries we can offer as well as patient outcomes by providing real-time anatomic information in the operating room.

What will be most challenging to you in the future?

Steve Lee, MD: It will be challenging trying to balance patients who need surgery but are at higher risk for morbidity and complications from spine surgeries due to the increasing complexities of their medical problems. For example, two of the more concerning associated medical problems are obesity and diabetes.

Jason Cheng, MD and Patty Haggen: We are most likely looking at bundling of payments in spine surgery, following the bundling in orthopedic joint replacement and cardiac surgery. It is important to demonstrate efficacy and quality outcomes in all spine surgery patients. In addition, patient selection can be challenging, identifying who will benefit from spine surgery, as well as getting patients to adhere to behavioral and life style modifications when they are not surgical candidates.

We are looking forward to helping our patients and primary care physicians access an appropriate level of quality care efficiently to avoid delays in our patients in seeking care in our emergency rooms or other ambulator settings.

I'm most proud of the development and continued collaboration with the preoperative clinic to assess patients pre-surgery and help to reduce complications related to surgery. The result has been the dramatic decrease in both complications and length of stay of all spine surgery performed at the hospital.

Do you have any patient stories to share?

Steve Lee, MD: If a patient has proper pre-surgery education on the realistic expectations and outcomes of spine surgery, everybody involved shares in the positive outcomes that are gained. The best stories are the improvement in chronic pain and daily function that can be possible with appropriate patient selection and indications for surgery.

- Steve Lee, MD