

Spine Rotation

At Queen's Medical Center and Kuakini Medical Center PGY-5

Description of Rotation

The Queens Medical Center (QMC) is a level II trauma center which services multisystem trauma patients from our entire state, via a trauma hotline and air ambulances. The PGY-5 residents are on the spine service at QMC for three months of their PGY-5 year. This rotation also takes place at Kuakini Hospital (for primarily elective spine surgery). Two faculty members participate on the Spine teaching service. These faculty attendings supervise and scrub with residents on spine cases, and teach residents in outpatient clinics. Residents are asked to present one topic at Grand Rounds, during the rotation.

Length:	3 months of PGY-V year
Locations:	Queens Medical Center and Kuakini Medical Center
Primary Supervisors:	Gregory Chow, M.D. (rotation coordinator) (Office: 528-2184) Jeffrey Lee, M.D. (Office: 523-8833)

Patient Care

Competency

Residents must be able to provide patient care that is compassionate, appropriate, patient-centered and effective for the diagnosis and treatment of orthopaedic spinal problems and the promotion of health. Significant leadership in running a patient centered service is expected.

Chief Residents are expected to:

Objectives

1. Demonstrate caring and respectful behaviors (verbal and non-verbal) with patients and families.
2. Elicit appropriate patient medical history information using effective questioning and listening skills. Perform a spine focused medical history interview.
3. Be able to perform a comprehensive orthopedic evaluation and physical exam for patients with spinal deformity, infection, degenerative diseases, and trauma admitted to QMC and Kuakini Hospital.
4. Be able to formulate a medical problem list, with prioritization of medical issues, to facilitate the development of treatment plans for patients with complaints referable to the spine.
5. Perform accurate and careful triage of trauma patients and coordinate their plan of care with attending faculty.
6. Learn to formulate surgical treatment goals for operative cases of degenerative, traumatic, inflammatory, neoplastic, and infectious conditions of the spine, as well as spinal deformities. Learn to prevent intra-operative technical complications during the treatment of said conditions. Make an early diagnosis and provide prompt treatment of acute neurological or systemic complications related to spinal surgery.
7. Learn to integrate the clinical presentation with imaging data to make decisions regarding operative care.
8. Be able to assess postoperative progress of spine trauma patients (including SICU course) and patients undergoing elective reconstructive spine surgery.
9. Recognize, diagnose and treat degenerative disc disease of cervical and lumbar spine.
10. Learn to prescribe and/or consult with allied health specialists in PT, OT, vocational counseling, psychiatry, and SW as appropriate and coordinate service referrals to all allied health personnel.
11. Be able to effectively counsel patients and families and caregivers about the plan of care.
12. Be a vital part and leader of the inpatient team under the supervision of attending faculty.
13. Be aware of, identify, and provide postoperative precautions and postoperative goals for therapists.

14. Recognize and diagnose neurological injuries and provide counseling regarding recommended treatment.
15. Learn to properly diagnose (by exam and evaluation of imaging studies), and discuss the methods of treatment for common spinal degenerative and infectious conditions.
16. Perform and assist in surgical procedures of the spine.
17. Develop treatment pathways for cervical and lumbar conditions. (I.e. disc disease, spinal stenosis).
18. Develop surgical skills via surgical cases.

Medical Knowledge

Competency

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences as applicable to spinal pathology, as well as the application of this knowledge to patient care. Residents are expected to be able to:

Objectives

1. Define and teach the classification systems for spinal trauma and deformities.
2. Discuss and understand physiology and biomechanics of spinal deformities and degenerative conditions.
3. Understand and perform surgical approaches to the spine, via anatomical dissections and surgical cases.
4. Promptly identify common post operative complications and discuss their prevention.
5. Describe and define common imaging findings in spinal infections, degenerative and neuromuscular conditions.
6. Know treatment algorithms for disc disease, spinal trauma, spondylolisthesis, and spinal infections.
7. Cite levels of evidence in the (spine) orthopedic case-driven medical literature.
8. Understand and apply biomedical statistics in evaluation of the medical literature.
9. Differentiate between patients who have non operative versus operative fractures and degenerative spinal conditions.
10. Understand and apply treatment of bone grafting and B.G. substitutes in spinal fusions.

Practice- Based Learning and Improvement

Competency

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life long learning. Residents are expected to develop skills and habits to be able to:

Objectives

1. Evaluate one's own knowledge, incorporating feedback from others.
2. Modify self-directed learning appropriately, including feedback provided from the OITE results. Lead OITE review sessions.
3. Appraise and assimilate evidence from scientific studies to enhance patient care, especially as it relates to trauma and reconstructive diagnoses and treatments.
4. Effectively use information technology to access and manage patient information.
5. Effectively use information technology and other resources to support one's own ongoing self-education (DVDs, CDs, Vumedi, etc).

6. Lead discussions concerning patient care with other health care professionals, attendings, including trauma team and consultants.
7. Attend and participate and take a leadership role in teaching conferences and rounds.
8. Produce a pre-rotation list of specific goals and objectives for each rotation; share these goals and objectives with the Program Director and faculty preceptors; track progress towards achieving these goals and objectives; and report on the accomplishments.
9. Use computer based portfolio to track and catalogue operative cases and “technical pearls”, especially for complex cases.

Systems Based Practice

Competency

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as be able to effectively call on other resources in the system to provide optimal health care. Residents are expected to:

Objectives

1. Collaborate with and maintain appropriate professional attitudes and behaviors toward other medical professionals and allied health personnel.
2. Assess how one’s own actions affect others, especially in the trauma service setting. Understand how mentoring influences junior residents.
3. Integrate and lead in the care of spinal trauma and reconstructive patients on service.
4. Use diagnostic and therapeutic procedures appropriately and judiciously.
5. Carefully and thoughtfully evaluate the risks, benefits, limitations, and costs of patient care.
6. Provide and collate data, and lead M&M conferences to positively affect patient care. Show supporting literature of best practices.
7. Participate in clinical pathways designed to improve patient outcomes.
8. Serve as patient advocates in dealing with system complexities.
9. Serve as patient advocates for quality patient care.
10. Work effectively with other services, health care agencies, and case managers.
11. Work to improve the system of medical care at Queens Medical Center and at Kuakini Hospital.

Professionalism

Competency

Residents must demonstrate commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to:

Objectives

1. Exemplify and display an observable respect and compassion toward patients.
2. Exemplify reliability, punctuality, integrity, and honesty.
3. Accept responsibility for one’s own actions and decision.
4. Apply sound ethical principles in medical practice, including issues of patient confidentiality, informed consent, provision for the withholding of care, and interactions with insurance companies and disability agencies.
5. Consider the effects of personal, social, and cultural factors in the disease process and patient management, as it relates to spinal injuries.
6. Demonstrate non-judgmental sensitivity and responsiveness to the age, culture, disability status, and gender of patients and colleagues.
7. Show ethical/professional leadership by example.

Interpersonal and Communication Skills

Competency

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

Objectives

1. Establish trust and maintain rapport with patients and families, residents and attendings.
2. Complete dictations and chart notes in a timely manner (monitored by medical records department and Program Director).
3. Discuss diagnoses, prognoses, and treatment options clearly and accurately to patients, and attendings/consultants.
4. Synthesize information and present clinical and diagnostic information clearly to colleagues.
5. Utilize effective listening skills.
6. Communicate and interact with staff/team in respectful, responsive manner.
7. Promote teamwork, and coordinate the work up of orthopedic patients on the spine service.