

## **Adult Spine**

### **Year**

R-3

R-4

### **Location**

Miami Valley Hospital (MVH)

### **Duration**

2 Months

### **Faculty**

James T. Lehner, MD

Marcos E. Amongero, MD

Jeffrey S. Hoskins, MD

### **Description**

The orthopaedic spine schedule will be a 2-month rotation and will be organized in a fashion that certain educational goals are obtained. The educational goals are to provide enhanced clinical education management of adult spine pathology with emphasis on both office initial evaluation/decision making for treatment and follow-up and procedures elective procedures/surgeries. There is additional emphasis on trauma cases admitted to the orthopaedic trauma service. The resident should become familiar with the pre-op work-up, operative care and post-op management as well as inpatient rehabilitation of the spinal cord injured patient.

Call will be taken at MVH in-house for the R-3 on the service. When the R-4 is on the service, call will be at Children's Medical Center.

### **Educational Objectives**

1. Work up and present a patient with an orthopaedic spine problem specifying the diagnosis, additional studies and treatment options. This should include the ability to take a detailed history and perform an accurate exam.
2. Describe the natural history of the patient's problem if untreated, treated nonoperatively and treated operatively.
3. Correctly assist and apply dressings, braces, halo, and orthotics to protect postoperative conditions.
4. Demonstrate pre-op readiness by specifying the following for each case:
  - Surgical indications
  - Incision, approach relevant anatomy and step by step procedure
  - Expected difficulties and pitfalls
  - Contingency plans
  - Criteria of acceptable results
  - Perform and assist surgical procedures for common adult problems: hip, radius, humerus, ankle fractures; primary total joint replacement; knee arthroscopy
  - List equipment needed for the fixation of simple fractures
  - Demonstrate attention to detail in follow-up for post-op patients
  - Recognize early complications
5. Manage the orthopaedic specialty spine clinic (first Tues of the Month) with the spine attending.

6. The spine resident has priority to assist with all traumatic operative spines.
7. Spine trauma consultations: The emphasis on this rotation is on inpatient and outpatient management of spinal conditions. For trauma, initial evaluations should routinely be handled by the orthopaedic trauma service or, if available, by the spine resident. All trauma cases should be reviewed by the spinal rotation resident with a discussion on management options and follow-up.
8. The goal is to achieve a balance of office evaluation, operative cases and office follow-up for continuity.
9. The spine resident is responsible for presenting the monthly spine case review conference on the second Monday of the month.

## Competencies

### Patient Care

Residents must be able to provide care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about the patient.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans, counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Provide healthcare services aimed at preventing health problems or maintaining health work with healthcare professionals, including those from other disciplines, to provide patient-focused care.

### Medical Knowledge

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate sciences (e.g. epidemiological) and the application of this knowledge to patient care.

Residents are expected to:

- Demonstrate an investigatory and analytical thinking approach to clinical situations.
- Know and apply the basic and clinically-supportive sciences which are appropriate to general orthopaedic surgery.

### Interpersonal and Communication Skills

Residents will at all times demonstrate behavior that is beyond reproach. Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, patients' families and professional associates. Residents are expected to:

- Demonstrate honest, open, civil, and effective communication with patients, staff, and colleagues (medical students, residents, and attendings).
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills.
- Elicit and provide information using effective nonverbal, explanatory, questioning and *legible writing skills*.
- Work effectively with others as a member or leader of a healthcare team or other professional group.

### **Professionalism**

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion and integrity.
- Be responsive to the needs of patients, society and the profession.
- Be accountable to patients, society and the profession.
- Demonstrate a commitment to ethical principles pertaining to:
  - Provision or withholding of clinical care.
  - Confidentiality of patient information.
  - Informed consent.
  - Business practices.
- Demonstrate sensitivity and responsiveness to patient's culture, age, gender and disabilities.

### **Practice-Based Learning and Improvement**

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information, and support their own education.
- Facilitate the learning of students and other healthcare professionals.

### **System-Based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of healthcare and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other healthcare professionals, the healthcare organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling healthcare costs and allocating resources.
- Practice cost-effective healthcare and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with healthcare managers and healthcare providers to assess, coordinate and improve healthcare and know how these activities can affect system performance.

### **General Schedule**

- Attend all morning conferences.
- Surgery schedule available at MVH OR desk or Dr. Lehner's office and Orthopaedic Institute of Dayton (Dr. Hoskins/Dr. Amongero).

**Monday** Patient office with Dr. Lehner 8:00 a.m. to 5:00 p.m.  
**Tuesday** First Tuesday monthly Spine Clinic at MVH Med/Surg Clinic  
**Wednesday** OR  
**Thursday** OR  
**Friday** OR

### **Reference List**

- Campbell's Operative Orthopaedics
- Spine OKU (should be read completely by the end of the rotation)
- *JBJS*
- Spine Self Assessment Exam (should be taken, obtain from Peggy Baldwin or Dr. Lehner)

### **Evaluation**

- Review goals and objectives with attendings at beginning of rotations.
- Mid-rotation review.
- End of rotation written evaluation turned into Peggy Baldwin (both attending and resident).

*Duty hours and Op logs must be up to date at the end of the rotation, before beginning the next rotation.*