

## **Hand Surgery**

### **Year**

R-2

R-4

### **Location**

Miami Valley Hospital (MVH)

### **Duration**

3 Months (R-2)

4 Months (R-3)

### **Faculty**

Peter S. Barre, MD

Douglas A. Gordon, MD

Beth A. Berrettoni, MD

Eugene C. Kim, MD

Christopher J. Danis, MD

Marc A. Trzeciak, DO

### **Description**

The orthopaedic resident will develop expertise in the diagnosis and treatment of traumatic and degenerative hand conditions. The rotation will involve working primarily at MVH, but will include participation in the Friday VA hand clinic and cases. The resident will also be responsible for managing the MVH Hand Clinic on Wednesday mornings. Call will be at MVH. It will be back-up chief resident call. All duty hour rules are to be followed.

### **Educational Objectives**

1. Work up and present a patient with common hand problems 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, casts, braces, and orthotics to protect postoperative conditions.
4. Demonstrate preop 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 result
  - List equipment needed for the fixation of simple fracture
  - Demonstrate attention to detail in follow-up for postop patient
  - Recognize early complications
5. The resident will dissect anatomic specimens during the rotation and demonstrate a thorough understanding of all anatomy and surgical approaches.
6. Residents will be part of a continuum of care for each particular patient.
7. Residents are required to participate in all didactic teaching activities at MVH
8. The resident will develop technical skill in the use of cortisone injections about the hand and wrist.

## 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 health care services aimed at preventing health problems or maintaining health work with health care 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.
- Lead the appropriate hand conferences assigned to the core lecture series.
- Participate in the monthly hand journal club with the hand surgeons in town.
- Be able to draw and label the brachial plexus and list innervations to all muscles of the upper extremity.
- Have a broad clinical and surgical experience that will include traumatic conditions (radius fracture: ORIF vs. external fixation; scaphoid ORIF, tendon repair, microscopic peripheral nerve repair) and reconstructive surgery (intercarpal arthrodesis, thumb trapezium tendon arthroplasty, resection implant arthroplasty, wrist arthroscopy, peripheral nerve neurolysis).
- Be able to describe the postoperative therapy protocols for flexor tendon injuries.

### 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 health care 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.
- Demonstrating 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 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 health care professionals, the health care 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 health care costs and allocating resources.
- Practice cost-effective health care 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 health care managers and health care providers to assess, coordinate and improve health care and know how these activities can affect system performance.

### **General Schedule**

- Attend all morning conferences
- Office days are mandatory
- First 8 weeks: Dr. Gordon (Contact Phyllis 937-369-5377)
  - Monday** Far Hills Surgery Center
  - Tuesday** MVH Surgery – Dr. Kim
  - Wednesday** Morning MVH Hand Clinic
  - Afternoon Surgical Cases
  - Thursday** Patient Office with Dr. Gordon
  - Friday** VA Hand Clinic and Surgical Cases

- Second 8 weeks: Drs. Barre & Berrettoni (Contact Mary Ann Schultz 937-435-4263 x16)  
**Monday** Far Hills Surgery Center  
**Tuesday** MVH Surgery – Dr. Kim  
**Wednesday** Morning MVH Hand Clinic  
Afternoon Surgical Cases  
**Thursday** Surgery/Anatomy  
**Friday** VA Hand Clinic and Surgical Cases
- The hand resident is to be contacted for all hand cases in the ER at MVH.
- Surgery days are flexible. If there are other more interesting hand cases, ask the Attending to scrub in on those cases that have the most educational benefit.

### Reference List

- Green's Hand Surgery
- OKU Hand/Upper extremity: Must read completely during the 4-month rotation.
- Hand Self Assessment Exam
- A Journal Club will be held every 1-2 months with the DO program. Schedule will be made available in hand clinic at MVH. Mandatory for hand resident; optional for other residents.

### 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 next rotation*.