

WRIST AND HAND ROTATION SPECIFIC OBJECTIVES

The following document is intended to guide you in some of the specific knowledge and skills you should develop on this rotation. This document is intended to augment but not replace the “Objectives of Training and Specialty Training Requirements in Orthopedic Surgery” and the “Specific Standards of Accreditation for Residency Programs in Orthopedic Surgery”. A copy of these documents is supplied in your residency handbook and is also available on the Royal College website.

The resident is expected to be able to describe the rotation specific objectives prior to or at the commencement of the rotation.

It is understood that a residency in Orthopaedics is a continuum. Senior residents will be able to meet the same objectives as junior residents as well as the senior objectives.

1. MEDICAL EXPERT

1.1. Cognitive and Diagnostic

Upon completion of the Upper Limb Rotation, the resident shall have knowledge, comprehension, problem-solving abilities and evaluation skills for the following:

1.1.1. Junior Resident

- 1.1.1.1. Common wrist and hand fractures and dislocations.
- 1.1.1.2. Degenerative, overuse and traumatic tendon injuries
- 1.1.1.3. Principles and indications for joint reconstruction of the wrist and hand
 - 1.1.1.3.1. Interposition, arthroplasty and fusion
- 1.1.1.4. Peripheral nerve injuries, entrapments, and chronic regional pain syndromes
- 1.1.1.5. Infections including those specific to the hand
- 1.1.1.6. Compartment syndromes
- 1.1.1.7. Common vascular, inflammatory and congenital conditions
- 1.1.1.8. Ganglions and neoplasms
- 1.1.1.9. Splinting and rehabilitation
- 1.1.1.10. Principles and indications for arthroscopy of the wrist

1.1.2. Senior Resident

- 1.1.2.1. Complex wrist and hand fractures and dislocations.
- 1.1.2.2. Complex periarticular fractures and fracture-dislocations
- 1.1.2.3. DRUJ and carpal instabilities
- 1.1.2.4. Principles of tendon transfers
- 1.1.2.5. Principles and indications for arthroscopy of the wrist
- 1.1.2.6. Joint contractures including Dupuytren's
- 1.1.2.7. Principles of amputations and arthrodesis

1.2. Technical

1.2.1. Junior Resident

- 1.2.1.1. Diagnostic and therapeutic injections to the wrist and hand
- 1.2.1.2. Closed reduction techniques for common wrist and hand fractures and dislocations
- 1.2.1.3. Common surgical exposures to the wrist and hand
- 1.2.1.4. Surgical management of:
 - 1.2.1.4.1. Compartment syndromes

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- 1.2.1.4.2. Nerve entrapment syndromes
- 1.2.1.4.3. Ganglions
- 1.2.1.4.4. Infections
- 1.2.1.4.5. Diagnostic arthroscopy of the wrist

1.2.2. Senior Resident

- 1.2.2.1. Management of intra-articular fractures of the wrist and hand
- 1.2.2.2. Management of scaphoid non-union
- 1.2.2.3. Corrective osteotomy of the distal radius
- 1.2.2.4. Tendon rupture repair and reconstruction
 - 1.2.2.4.1. Acute tendon injury
 - 1.2.2.4.2. Extensor Pollicis Longus
- 1.2.2.5. Joint Instabilities
- 1.2.2.6. Stabilization techniques for carpal dissociations
- 1.2.2.7. Arthroplasty
 - 1.2.2.7.1. Interposition arthroplasty – CMC, DRUJ
 - 1.2.2.7.2. Wrist and digit joint replacement
- 1.2.2.8. Arthroscopy of the wrist
- 1.2.2.9. Arthrodesis
 - 1.2.2.9.1. Wrist
 - 1.2.2.9.2. Digits
- 1.2.2.10. Treatment of joint contractures
 - 1.2.2.10.1. Dupuytren's disease
- 1.2.2.11. Amputations – traumatic and elective

2. COMMUNICATOR

2.1. Junior Resident

- 2.1.1. The resident should be able to obtain an informed consent for wrist and hand procedures.
- 2.1.2. Understand and demonstrate the importance of communication among health professionals involved in the care of an individual patient, including physician colleagues, and allied health professionals.
- 2.1.3. Demonstrate skills in working with other providers and patients to overcome communication challenges including anger, confusion, sensory or cognitive impairment, socio-economic or ethno-cultural differences.

2.2. Senior Resident

- 2.2.1. Understand the consent requirements for communication with third party agents
- 2.2.2. Be capable of effective oral and written communication with third party agents such as Workers' Compensation Insurance and disability insurers

3. COLLABORATOR

3.1. Junior Resident

- 3.1.1. Define the role and expertise of the health care professionals involved in patient care.

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3.1.2. Demonstrate the ability to accept, consider and respect the opinions of all other team members, while contributing specialty-specific expertise.

3.2. Senior Resident

3.2.1. Develop skills necessary for successful coordination and implementation of a treatment plan

3.2.2. Advocate and assist in conflict resolution with third party agents

4. LEADER

4.1. Junior Resident

4.1.1. Utilize time and resources effectively in order to balance patient care, outside activities and personal lifestyle considerations.

4.1.2. Establish an understanding of health care resource allocation and educational resources.

4.1.3. Effectively utilize information technology to optimize patient care and for continued self-directed learning.

4.2. Senior Resident

4.2.1. Recognize the financial impact of implementing new technologies into clinical practice

4.2.2. Prioritize emergent and elective care based on evidence for the benefit of individual patients, populations served and resource availability

4.2.3. Demonstrate leadership when allocating finite health care resources

5. HEALTH ADVOCATE

5.1. Junior Resident

5.1.1. Identify the determinants and risk factors for wrist and hand injury and disease such as age, gender, occupation, education, general fitness and substance abuse

5.1.2. Know and apply preventive measures to minimize deterioration in overall general health and to optimize results of upper limb surgery.

5.1.3. Know and apply measures to minimize complications of surgery.

5.2. Senior Resident

5.2.1. Be able to discuss strategies of health promotion that may diminish wrist and hand injury and disease prevalence

5.2.1.1. Farm / workplace safety, ergonomics

5.2.1.2. Insufficiency / geriatric fractures

5.2.2. Advocate for timely access to care

6. SCHOLAR

6.1. Junior / Senior Resident

6.1.1. Demonstrate attributes of self-directed learning by

6.1.1.1. Create a personal learning project

6.1.1.2. utilize critical appraisal to identify possible solutions

6.1.2. Participate in the education of patients, fellow residents, housestaff, and allied health professionals.

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- 6.1.3. Pose a research question related to a common upper limb disorder, conduct an appropriate literature search, and propose a research methodology that attempts to answer the question.

7. PROFESSIONAL

7.1. Junior / Senior Resident

- 7.1.1. Deliver the highest quality care with integrity, honesty and compassion.
- 7.1.2. Exhibit appropriate personal and interpersonal professional behaviour.
- 7.1.3. Practice in an ethically responsible manner that respects medical, legal and professional obligations.
- 7.1.4. Recognize, analyze, and attempt to resolve ethical issues such as consent, conflict of interest, resource allocation, and practice ethics in medical research, etc.

Hand and Upper Limb CTU – Professional Domain

The Hand and Upper Limb CTU has primary responsibility for teaching and assessment of the Professional domain. Dedicated teaching sessions are incorporated into the weekly one-hour Thursday teaching sessions with one session occurring every three block rotation on the service. Teaching topics have included: “Let’s Define Professionalism” and “Surgeons and Industry – Pros and Cons”.