

Knee/Sports Medicine Rotation

Year

R-4

R-5

Institution

Miami Valley Hospital (MVH)

Faculty

Matthew W. Lawless, MD

L. Joseph Rubino, III, MD

Description

The resident will rotate with Dr. Lawless and Dr. Rubino in their offices at MVH, area training rooms and their surgeries at MVH and the Far Hills Surgery Center. All duty hour rules are to be followed.

This rotation encompasses the full spectrum of disorders involving the knee and sports medicine. The resident will experience initial evaluation, examination and diagnostic studies to develop diagnosis and treatment plans (both operative and nonoperative).

Educational Objectives

1. Work up and present a patient with a knee problem specifying the working diagnosis, additional studies to confirm or change the diagnosis, the treatment alternatives and expected outcome. This includes demonstrating the ability to take a detailed history and perform an accurate lower extremity exam.
2. Recognize and take into account the lower extremity angular and rotational alignment, relevant biomechanics, and lifestyle.
3. Prescribe appropriate bracing.
4. Describe the nature history of the patient's problem if untreated, treated nonoperatively and treated operatively.
5. Perform local anesthesia to include: knee, GT bursa; field local infiltration; joint injection for pain localization.
6. Demonstrate pre-op readiness by specifying the following for each case:
 - Surgical indications and goals
 - Incision, approach relevant anatomy and step-by-step procedure
 - Three-dimensional considerations
 - Expected difficulties and potential pitfalls
 - Contingency plans
 - Criteria of acceptable results
 - Pre-op planning knee osteoarthritis
 - Osteotomy
 - Unicompartement arthroplasty
 - TKA – CR versus PS versus CCK versus Hinge
 - Patient positioning – Osteotomy, Unicompartement arthroplasty, TKA
 - Work-up failed arthroplasty
 - Post-op knee arthritis – Immediate hospitalization, long term

7. Perform and assist surgical procedures for common knee problems: total knee arthroplasty, unicompartment arthroplasty, osteotomies, knee ligament reconstruction, removal of hardware, arthroplasty.
8. List the equipment needed for all the basic procedures and demonstrate the ability to correctly review the completeness of this equipment before starting a procedure.
9. Demonstrate attention to detail in follow-up for postoperative patients.
10. Recognize treatments.
11. Demonstrate the ability to recognize and initiate treatment of complications.
12. Critique knee literature at the department Journal Clubs.
13. Learn appropriate on field coverage for sporting events by active participation.
14. Determine when appropriate return to play for various injuries by providing on field and training room coverage.
15. Learn treatment for acute and chronic sports injuries.
16. Learn treatment of overuse injuries.
17. Learn work-up and diagnosis of various athletic injuries.
18. Learn treatment of overuse injuries. Learn work-up and diagnosis of various athletic injuries.
19. Prepare for surgery by learning proper bed, instrument, and or soft tissue graft request.
20. Learn proper draping, table, room setup, and instrument set up.
21. Learn operative technique of multiple upper and lower extremity injuries (i.e. shoulder and knee arthroscopy, rotator cuff repair, anterior shoulder stabilization, subacromial decompression, ACL reconstruction, meniscal repair, etc.).
22. Learn postoperative treatment for above procedures.
23. Understand when and what alternatives exist for the operative injuries.
24. Develop working relationship with athletic trainers from pre-participation physicals through out season.

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.
- Perform competently all invasive procedures considered essential in knee and sports medicine clinic.
- 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 knee surgery and sports medicine.

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 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 and society that supersedes self-interest.
- Be accountable to patients, society, and the profession.
- Commitment to excellence and on-going professional development.
- 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 online 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

Monday	A.M. - Research P.M. - Training Room Fairborn High School/Greene Memorial Hospital
Tuesday	A.M. - Operating Room P.M. - Operating Room
Wednesday	A.M. - 2200 Private Practice Office/or with Dr. Rubino
Thursday	A.M. - VA P.M. - 2200 Private Practice Office/Training Room WSU
Friday	A.M. – Operating Room P.M. – Evening High School Football

All Wright State male and female home basketball games

Reference List

- American Journal Sports Medicine
- Knee Surgery (Scott)
- Ligament Balancing (Whiteside)

Evaluation

- Review Goals and Objectives with attendings at beginning of rotations.
- Mid-rotation review.
- End of rotation written evaluation turned in to Peggy Baldwin (both attending and resident).
- Duty hours and OP logs must be up-to-date at end of rotation.