

Yale University School of Medicine Department of Orthopaedics and Rehabilitation

NEWSLETTER

Residents Corner:

What is an Resident or Fellow

“Hello, My name is Dr. *Blank*, one of the Orthopaedic Residents...” This is a greeting you often hear around the medical center.

Surgical residents are doctors in training for a specific specialty such as orthopaedics. They have completed their MD, and are furthering their training as part of a five year program.

At Yale there are five orthopaedic positions offered each year from a pool of over 500 graduating medical students. Their training consists of one year of general surgery internship followed by 4 years of training in the various orthopaedic subspecialties. As formal employees of the hospital, their duties include assisting in the care of orthopaedics patients in the ER, caring for hospital patients, acting assistants in the operating room, and interacting with established patients and new patients in the office.

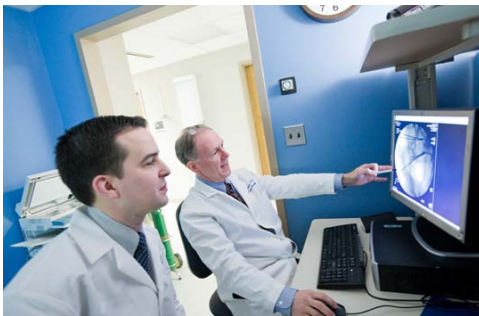


Image: Resident with Dr. Baumgaertner.

Prior to going into a practice of their own, many residents elect to complete a one year “Fellowship” in a specific subspecialty, such as Spine, Orthopaedic Oncology, Hand, Foot and Ankle, Sports Medicine, Joint Replacement or Pediatrics.

From the clinics:

What is a Joint Injection?

Joint injections are routine procedures in the orthopaedic clinic that serve both diagnostic and therapeutic purposes. As a quick and relatively low-risk tool, they may be considered in the conservative management of many degenerative conditions.

Injections usually involve a combination of corticosteroid (an anti inflammatory) and a local anesthetic. The anesthetic may provide short term relief, whereas the steroids often take several days to weeks to reach their full effect.

Radiology Corner:

What is a radiograph for?

We all know that radiographs are done to “see” the bones, but orthopaedists look for much more when examining X-rays following fractures. Surprisingly, looking at the exact spot of the break is not as important as looking nearby, where new bone grows (called “callus”) to bridge the fracture gap. Callus is an early sign that can predict healing.

Although a fracture that involves the cartilage surface right in the joint has to be put back perfectly into its position (“reduced” is what the doctor will say), when fractures occur away from joints, having the pieces exactly where they came from is not as important as is the overall alignment (straight versus bent) of the bone.

Living bone will fill in small gaps, but an adult bone that heals crooked will not straighten out the way a child’s fracture can.

Orthopaedists look very closely at the implant used to fix the bone. Pins, screws, plates, and large rods can loosen and even break if healing is slow or forces are high. Properly taken radiographs are usually very helpful at identifying problems with the hardware and healing process, but they are not as good at telling when a bone is healed, nor how strong it is.

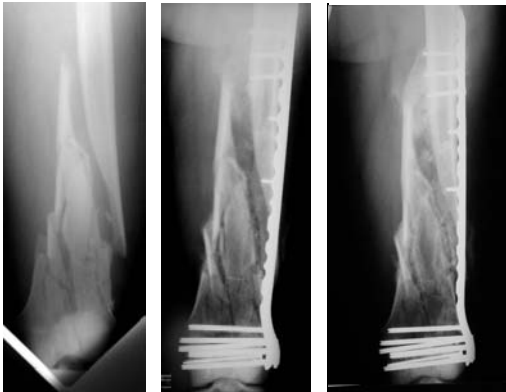


Image: A complex fracture of the femur (thighbone) that involves the knee joint at injury, after fixation, and after healing has occurred.

In summary, your doctor orders radiographs to assess the bone’s healing progress, the position of the joint fragments, the overall alignment of the bone, and the status of the implants used. Comparing X-rays from several weeks or even months apart is particularly helpful. If you are getting X-rays for a

fracture today, ask to see them with your doctor, and look for these clues to a happy ending.

What is an MRI?

MRI stands for Magnetic Resonance Imaging. This imaging modality predominantly evaluates soft tissues that are not as well defined by regular x-rays or types of imaging.

A MRI scanner consists of a very large magnet that sends signals through the body and converts them to images on a computer. During the exam, the patient lies on a table that moves into the center of the magnet. There are loud “knocking” noises during the scanning process. Movement will blur the images; so the patient will be asked to stay still.

A typical exam takes about 45-60 minutes. Some MRI’s have stronger magnets and therefore provide clearer images. Some MRI scans, are enhanced by an injection of a “contrast agent”.



Image: MRI machine.

Newsletter information:

This newsletter is designed to provide information and updates about the department.

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