They might not be on the field, but radiologists are an important part of the NFL’s medical team.

When you’re watching an NFL game and a player gets taken for X-ray imaging, you might wonder about your radiology colleagues behind the scenes.

That imaging suite in the stadium bowels? X-ray only. And as for the radiologists, they’re often not on site, according to Martin Lazarus, MD, radiologist for NorthShore University HealthSystem and consulting radiologist for the Chicago Bears. “Some franchises prefer the radiologist to be on-site, some off-site,” said Lazarus, who only occasionally is on the field for the games. The Dallas Cowboys and New York Jets prefer their radiologists off-site.

The radiologist needs to be available at all times that the athletes might be imaged, day or night. If a team doctor evaluates an athlete for an injury, whether on field or in practice, and determines he needs imaging, “they usually called me directly,” said Ross Borzykowski, MD, who was the primary radiologist for the New York Jets from 2012-2013 when he worked at Atlantic Sports Health in New Jersey. With a well-worn routing system, the team physician can contact the imaging facility and technologist to schedule the scans. Borzykowski and Lazarus both said their health systems have multiple imaging facilities, and they route the patient to the most convenient site for the athlete, or the one with the best equipment or availability.

Many of the images would be read from home, said Borzykowski. “They never had to wait more than few minutes to find out what’s going on. These things have to be decided fast. It’s a team effort.”

At the Stadium

As for what happens at the stadium, “we’re first responder imaging,” said Norm Burgess, BS, RT, the lead radiology technologist at Dallas Cowboys home games since 1986. Many are surprised to find out that the stadiums only have X-ray equipment on site. If the players need other imaging modalities, they go to another facility, usually after the game or the next day.

The number of players imaged in a game varies “from zero to a lot,” said Burgess, with most of the imaging done after the game. “That’s when they get them in, shower up, the doctors check them out, and say ‘let’s get an X-ray.’” Since Burgess represents the NFL, not the Cowboys, he wears an NFL shirt and images athletes from both teams. He gives the visiting team a CD of their X-ray images to take back with them.

Burgess typically X-rays the cervical spine, lumbar spine, ribs, extremities, elbows, shoulders, fingers, wrists, hands, or toes. At the stadium, the X-rays are read by the orthopedic surgeons, not radiologists. Time is of the essence at the games. “Everything we do at the game is fast,” said Burgess. “They want it done right away. There’s no taking your time, it’s just ‘let’s go.’”

Outside the Stadium

On Monday mornings (or Tuesdays, if it’s a Monday game), the team has a “sick call” at the stadium, said Burgess. The doctors check out the players and order an X-ray if needed, though another technologist handles those. The radiologists also hold imaging appointments at their facilities for the athletes after game day as well. “I had four to five slots for them Monday or Tuesday morning,” said Borzykowski.
Football is a high volume injury sport compared to other sports. “Twenty percent of the team can be injured,” said Lazarus. The day after a game, his facility might image one to 10 athletes. Unfortunately for friends of the medical staff, the athletes are treated just like the patients they are, with staff following HIPAA regulations. “We’re televised, so when a player gets hurt, while they’re taking him in for X-rays, my cell phone gets crazy (with people) asking what’s wrong, even though they know I can’t tell them,” Burgess said. “My reply is ‘what are the announcers saying?’” Usually the trainers tell the broadcasters what they’re evaluating.

Even though Lazarus said he knows some of the other NFL consulting radiologists, he rarely talks to them about NFL imaging because of HIPAA and other NFL confidentiality concerns. As consulting radiologists, the doctors and staff use plain films, ultrasound, CT, MRI, ultrasound, and procedures like arthrography. They also perform or read imaging on rookies and free agents the team might draft, said Lazarus. If the team’s orthopedic surgeon orders scans of a potential athlete, Lazarus will perform or read them, including at the NFL scouting combine if he goes.

**How Is Imaging NFL Players Different?**

Since musculoskeletal (MSK) radiologists are used to working with athletes (including “weekend warriors”), there’s not a big difference in imaging NFL players, said Lazarus. “We’re experienced enough to deal with any kind of athletic injury,” he said, but interpreting exams is more difficult with athletes who have had numerous surgeries. “When you’re doing MRI exams post-op, it makes a more difficult exam to interpret.”

It’s critical with athletes to get their prior studies, either from their college’s program or a previous franchise, said Lazarus. The athletes don’t bring these images with them when switching teams. The other physicians or trainers usually do the leg work to get them.

Injuries might be different depending on the sport, and even in the position played. Lazarus said he sees a lot of shoulder and posterior labral injuries, especially in blocking linemen. Quarterbacks have many more shoulder or elbow injuries from throwing.

Technologists need to up their game when imaging these athletes. “An average person has a little more padding,” said Burgess. “[NFL players] are just solid muscle. It takes more technique to get good images on the thicker parts of these players.”

**Are Diagnosing Concussions an Issue for Radiologists?**

With increased awareness of concussions and traumatic brain injuries, does this affect what NFL radiologists do? The number of MRI and CT brain scans has increased, said Lazarus, “simply because there’s increased reporting of head injuries of the athlete.” But the decision about whether the athlete can play is not the radiologist’s. “They have to pass a clinical exam, a neuro exam, before they can play. That’s the critical part,” he said.

During his time with the Jets, Borzykowski was not asked to evaluate traumatic brain injury, though he said that perhaps those scans went to the neuroradiologist instead. With neuroimaging techniques getting better and more advanced, Borzykowski said he thinks that will be a larger part of NFL radiology in the future.

**How to Get an NFL Radiology Job**

While each franchise might operate differently, getting the radiology gig often comes down to relationships, radiology staffing and imaging facilities, not the NFL itself. “They don’t get involved in that level,” said Borzykowski. When Borzykowski interviewed for the radiology job at Atlantic Sports Health, he knew that a large part of the position was to be the lead radiologist for the New York Jets. His practice was part of the same health system as the orthopedic surgeon’s practice.

For his gig with the Chicago Bears, “I contacted the team physicians when I started here, and through that relationship I became the radiologist,” said Lazarus. He said his health system has an advantage because of its large MSK section with five attendings. Typically, a sports team prefers to go through one radiologist, even if they also use others on the radiology team, said Lazarus. His MSK colleagues read studies if he’s not available. “If there’s any kind of head or neck or spine injury, neuroradiology would also be involved in those cases. If there’s a body injury, a visceral injury, body imagers would be involved.” Lazarus said it’s also important that his health system has MRI scanners scattered throughout the Chicago area, convenient to Soldier Field and the practice facility.

As a radiology technologist, Burgess’ job is only on game day; it’s part time and seasonal. While now otherwise retired, he started with the Cowboys while employed by day as a technical consultant for Eastman Kodak. “You don’t apply for this kind of job,” Burgess said. “It’s who you know. I replaced another Kodak RT that got transferred to Chicago. At the time, I was his back-up.”

Burgess said while some teams pay their techs, the Cowboys don’t. They provide the techs with home game tickets for friends or families, worth about $250 each. The techs watch the game from the 30 yard line next to the Cowboys’ bench, and only go into the X-ray suite during a game when an
athlete needs imaging. “We show up on TV quite a bit, escorting a player off the field,” Burgess said. “I’m the grey hair guy who walks the giants off the field. Those guys are huge.”

**What's Changed Through the Years?**

Aside from larger imaging rooms in newer stadiums, said Burgess, he no longer hand-processes the X-rays. With more convenient and higher quality digital technology, the number of imaging studies has increased.

Lazarus agrees that imaging is used more frequently than when he started with the Bears. While there are more MRI scans now, he also does ultrasounds, something rarely requested 15 years ago. He uses ultrasound for any kind of tendon or ligament injury, typically in foot or ankle, as well as shoulder and elbow injuries.

What hasn’t changed is that, as part of the NFL medical team, radiology is generally behind the scenes. The medical team collaboration is important in taking everyone’s judgment into account. The clinician and orthopedists are dealing with the higher level medical issues, said Borzykowski. “They have really good clinical acumen and judgment, and often it’s correct. But the MRI is the answer most of the time.”


Links: