The Forgotten Joints

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Two of the most commonly overlooked joints in the orthopedic exam are the subtalar and Lisfranc joints. This often results in misdiagnosis, inappropriate treatment, and a poor outcome. The complex anatomy of these joints can obscure fractures or arthritic changes on initial radiographs and lead to a diagnosis of chronic pain of unknown etiology. In this issue of *The American Journal of Orthopedics*, these joints are examined in detail. Langer and DiGiovanni report on fractures of the lateral process of the talus, and Sayeed and colleagues review the pathology of the Lisfranc joint. These 2 excellent articles underscore the high index of suspicion required to make a correct diagnosis.

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Common problems seen in an orthopedic foot and ankle practice are chronic pain in the lateral aspect of the ankle and the dorsal midfoot. The source of these symptoms is frequently the subtalar or Lisfranc joint. I recently saw a young woman who had fallen from a balcony 2 years previously. She had fractured her distal radius and was diagnosed with a sprained ankle. The distal radius had healed, but her ankle still hurt laterally. For over 1 year she had received treatment from a physical therapist and pain specialist. Her diagnosis was a chronic ankle sprain. On exam, she had focal tenderness over the lateral hindfoot, just inferior to the tip of the fibula, consistent with subtalar pathology or possible peroneal tendinopathy. The peroneal tendons tracked well, and she had no signs of posterior impingement of the ankle. She had reduced subtalar motion. A computed tomography (CT) scan revealed a displaced 2-cm fracture of the lateral process of the talus with extensive subtalar arthritis. She required a subtalar fusion, which probably could have been avoided had her fracture been diagnosed and treated acutely. Chronic subtalar arthritis—as a result of trauma, a tarsal coalition, or osteoarthritis—is invariably associated with decreased motion of the subtalar joint. This can be difficult to detect, however, as lateral laxity of the ankle or hypermobility of the transverse tarsal joint can mimic subtalar motion.

Chronic arthritis of the Lisfranc joint is another commonly overlooked diagnosis. I frequently see patients with chronic dorsal midfoot pain who have been diagnosed with a chronic foot sprain or overpronation. There is usually no history of trauma. There may be small spurs palpable over the second and third tarsal-metatarsal joints, and there is always very focal tenderness directly over the underlying arthritic joints. Passive range of motion (ROM) with axial compression usually causes pain, and crepitus may be present. The Lisfranc joint is often not visualized completely on standard anteroposterior and lateral radiographs, and an oblique view of the midfoot is required. The definitive diagnosis is confirmed by CT scan, which should always include the fourth and fifth cuboid-metatarsal joints. Ultimately, a fusion of the involved joints is curative, although the fifth cuboid-metatarsal joint is best treated with a resection arthroplasty to preserve motion. When a patient points to the dorsum of the midfoot as the source of their symptoms, the diagnosis is Lisfranc arthritis, until proven otherwise.

Pathology of the subtalar or Lisfranc joint is a frequent source of unexplained chronic pain in the lower extremity. In pursuit of the correct diagnosis, it is important to not forget the forgotten joints. ■

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