The authors reported no potential conflict of interest relevant to this article.

The Case
A 12-year-old girl presented to my office (JH) with bilateral wrist pain. She had fallen on both wrists palmar-flexed and then, while trying to get up, landed on both wrists dorsiflexed. The patient did not hear any “pops,” but felt immediate pain when her wrists hyperextended. Hand, wrist, and forearm x-rays were negative bilaterally for fractures. She was placed in bilateral thumb spica splints.

At follow-up one week later, the patient reported 6/10 pain in her left wrist and 7/10 pain in her right wrist. The pain increased to 10/10 bilaterally with movement and was not relieved by icing or nonsteroidal anti-inflammatory drugs. On physical exam, there was bilateral swelling of the wrists without ecchymosis or erythema. The patient had limited passive and active range of motion, especially during wrist extension. She also had tenderness to palpation over the anatomical snuff box, extending proximally to the distal radius bilaterally. She had no tenderness over the ulna or metacarpals, no loss of sensation in any area nerves, and she was neurovascularyly intact bilaterally.

Based on the mechanism of injury, undetected fracture or full thickness ligament tear were both possible. Because of this, and because magnetic resonance imaging (MRI) entails no radiation exposure, MRI was chosen for additional imaging of both wrists.

The Diagnosis
The MRI revealed bilateral, nondisplaced, extra-articular fractures extending through the scaphoid waist, with surrounding bone marrow edema. In the right wrist, the patient also had a low-grade partial tear of the membranous portion of the scapholunate interosseous ligament (SLIL) at the scaphoid attachment (FIGURE 1). In the left wrist, she also had a low-grade sprain of the SLIL without tear (FIGURE 2).

Discussion
Carpal fractures account for 6% of all fractures.1 Scaphoid fractures are the most common carpal bone fracture among all
Scaphoid fractures are commonly missed on x-rays because they are usually nondisplaced and hidden by other structures superimposed on the image.

**FIGURE 2**
Findings on the left wrist were similar to the right

Magnetic resonance imaging scan of the patient’s left wrist also showed a nondisplaced fracture of the scaphoid waist (blue arrow), as well as a low-grade sprain of the scapholunate interosseous ligament (SLIL) without a tear.

For patients presenting with wrist pain after trauma to the wrists, assess anatomical snuff-box tenderness and obtain x-rays. Do not be falsely reassured by negative x-rays in the presence of a positive physical exam, however, as scaphoid fractures are often hidden on x-rays. If tenderness at the anatomical snuff-box is present and doesn’t subside within a few days, apply a short-arm thumb splint and obtain subsequent imaging.

If bilateral, nondisplaced, stable scaphoid fractures are diagnosed, conservative
CASE REPORT

Treatment with long-arm and short-arm casts is a viable alternative to surgery. This treatment decision should be made on an individual basis, however, as it requires the patient to have frequent PCP visits, assistance with ADLs, and complete adherence to the treatment plan.

References

If tenderness at the anatomical snuffbox is present and doesn’t subside within a few days, apply a short-arm thumb splint and obtain subsequent imaging.