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New hip and wrist fracture screening MRI protocols are now available for urgent assessments.

Imaging evaluation for radiographically occult hip and scaphoid fractures is an issue in the acute management of hip or wrist pain. MRI is the most appropriate imaging study for occult hip fracture screening, especially for patients with osteoporosis, and is more sensitive than CT.

The limited screening protocol is intended to facilitate working in urgent MRI assessments for occult fractures and will not replace a full MRI protocol for evaluating other causes of hip or wrist pain. MRI or CT can be used for ruling out scaphoid fractures.

I have worked with the hospital staffs to set up new exam orders that can be used for limited fracture screening MRIs of the hip or wrist. This will reduce the technical charge by about 25%. The new limited protocols are available at MRI scanners at MMC, Kalkaska, Charlevoix, Cadillac and Grayling.

The screening protocols only have 3 scans (Coronal T1, Sagittal T1 and Coronal STIR, all with small field of view). The actual scan time will be under 15 minutes but additional time will be necessary to get patients on and off the scanner table.

The radiology, orthopedic and emergency medicine literature address this issue. I have referenced 5 articles below. For questions please email me at tkennell@mhc.net.



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Sources:

- 1) Imaging Choices in Occult Hip Fracture: *J Emerg Med.* 2009;32(3):144-152.
- 2) Orthopedic Pitfalls in the ED: Radiographically Occult Hip Fracture: *Am J Emerg Med* 2002;20:234-237.
- 3) Cost-Effectiveness of Immediate MR Imaging Versus Traditional Follow-Up for Revealing Radiographically Occult Scaphoid Fractures: *AJR* 2001;177:1257-1263
- 4) MDCT and Radiography of Wrist Fractures: Radiographic Sensitivity and Fracture Patterns: *AJR* 2008; 190:10-16
- 5) Occult Scaphoid Fractures: Comparison of Multidetector CT and MR Imaging—Initial Experience: *Radiology* 2006; 240:169-176

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