

MONTHLY NEWSLETTER

April 2006

NEW HIP AND AETNA SCHEDULING PLANS

Patients must call HIP and Aetna to select Imaging Center

Effective December 1, 2005, HIP Health Plan of New York instituted a new Radiology scheduling plan for its Direct Fee For Service Membership. The new scheduling plan affects outpatient imaging services for MRI, CT, and PET. Effective April 1, 2006, Aetna instituted the same program for its New York members

As usual, the referring physician must call CareCore National (1-866-417-2345 for HIP and 1-888-622-7329 for Aetna) to obtain medical necessity determination.

Upon approving the requested procedure, CareCore will then contact the patient to schedule the procedure at a participating location which the member selects. Members can also contact CareCore directly (1-866-699-8131 for HIP and 1-800-792-8793 for Aetna) to select the facility.

CareCore will then fax a notice to the referring physician of the location where the imaging procedure will be performed.

If CareCore cannot contact the patient, an imaging facility will be chosen for the patient by CareCore. Therefore, it is important that the patient contact CareCore prior to the procedure, so that the patient can receive radiology services at the site chosen by the patient and referring physician.

PHONE NUMBERS

HIP

Authorization: 1-866-417-2345
Select Facility: 1-866-699-8131

Aetna

Authorization: 1-888-622-7329
Select Facility: 1-800-792-8793

UPDATE ON MR SAFETY

In response to the frequent questions we receive about MR safety, the following are updated recommendations regarding safety and MR imaging.

Metallic orbital foreign bodies and screening: Screening with x-rays should only be done if an ocular injury related to metallic objects was sustained and the patient was **not** informed that the post injury eye exam was normal.

Pregnant patients: To date, there has been no indication that the use of clinical MR imaging during pregnancy has produced deleterious effects on the fetus. Thus the American College of Radiology has stated that in cases where MRI can affect the care of the mother and fetus, the MR procedure can be performed with oral and written consent, regardless of trimester. Gadolinium based MR contrast agents cross the placenta and into the fetal circulation. Effects on the fetus are unknown and potential benefits and risks must be carefully discussed if contrast MR is contemplated.

Aneurysm clips: Aneurysm clips made of ferromagnetic material are contraindicated for MR procedures. Several studies have shown that patients with non-ferromagnetic clips can have MR procedures. The ferromagnetic nature of the clips must be obtained from the patient and surgeon.

Heart valve prosthesis and annuloplasty rings: Since the magnetic field related forces exerted on heart valves and annuloplasty rings are deemed minimal compared with the forces exerted by the beating heart, MR procedures are considered safe with any of the heart valves prosthesis or annuloplasty rings.

Coils, filters and stents: For coils, filters and stents without magnetic field interaction, an MR procedure can be performed immediately after placement. For implants with weakly ferromagnetic materials, it is recommended to wait 6-8 weeks. Devices rigidly fixed in the body such as bone screws can be studied immediately.

Cardiac Pacemakers: There is growing evidence that MR procedures can be performed safely on patients with pacemakers with physician monitoring. However, at the present time, the presence of a pacemaker is considered to be a strict contraindication for MR imaging.

Neurostimulators, Cochlear implants and Infusion pumps: As with pacemakers, neurostimulators, cochlear implants and programmable drug infusion pumps are considered contraindications for MR imaging. However, recently some of these devices have received "MR safe" labeling by the FDA.

References:

Shellock, Cruet. MR procedures: Biologic effects, safety, and patient care. Radiology Sept, 2004.

Kanal et al. American College of Radiology White Paper on MR safety: 2004 Update and revisions. AJR, May 2004.

CASE OF THE MONTH

BUCKET HANDLE TEAR

History: 52 year old male with pain and locking of the left knee.

Findings: Coronal T2 SPIR (Figure 1) and T1-weighted sagittal image (Figure 2) demonstrate a tear of the medial meniscus, with displacement of the medial fragment into the medial notch of the knee.

Discussion: A Bucket Handle Tear is defined as a vertical peripheral tear of the meniscus, with the displaced medial portion to the notch of the knee.

The most common signs/symptoms include pain/locking after a single traumatic event. There is difficulty in ambulation secondary to block of extension of the knee, if the free fragment is displaced to the central weight-bearing surface or notch of the knee. The clinical profile includes joint line tenderness, clicking, and the feeling of “giving way”. Locking typically involves a mechanical block preventing full extension and results in difficulty ambulating.

The lesion usually is seen in younger patients, who are physically active. The lesion is seen in males more common than females. Displacement leads to a locked knee and requires surgery.

The best diagnostic clue involves the coronal MRI imaging which demonstrates a small meniscus body and meniscal fragment(s) at the notch, resulting in 2 meniscal fragments. The “Double Posterior Cruciate Ligament sign” can be seen on the sagittal images. The medial meniscus is more commonly involved than the lateral meniscus. A 2-5mm displaced fragment is most commonly seen. The displaced meniscus fragment resembles the handle of a bucket. The donor meniscus (residual body) remains in place, while the displaced fragment is either partially displaced or displaced to the notch of the knee. The displaced fragment is attached to the donor meniscus at both ends.

MRI findings include increased signal intensity of short TE sequences

extending to the articular surface (i.e. a tear), with a vertical longitudinal tear giving rise to the fragment and donor. The displaced bucket-handle fragment presents as a decreased signal mass with variable displacement towards or into the notch. A “Double Delta Sign” can be seen as a flipped inner meniscal fragment adjacent to the anterior horn of the donor meniscus, producing two triangle shaped structures adjacent to each other anteriorly. Coronal and sagittal images demonstrate blunting of the meniscus donor with the remaining meniscus smaller than normal.

Surgical treatment with excision of the fragment is performed if the tear extends through the nonvascularized free edge or if the fragment is separated from the parent meniscus.

(Case prepared by Anthony Italiano, M.D., head of musculoskeletal imaging at Main Street Radiology)

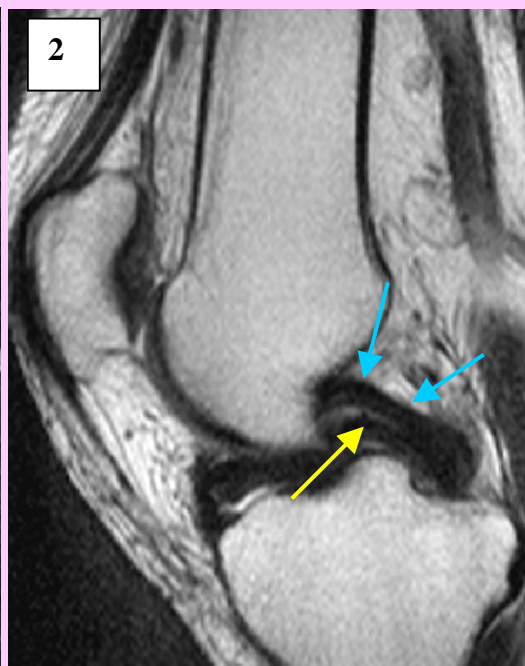
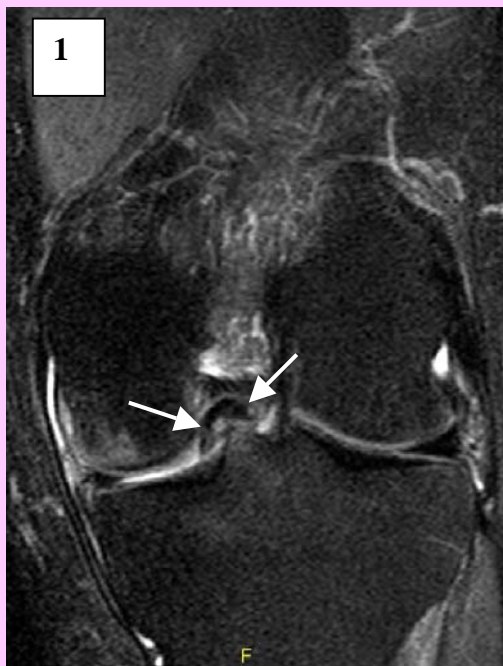


Figure 1: T2-weighted coronal image of the left knee shows a torn displaced medial meniscus (arrows) at the notch of the knee. The shape of the fragment resembles a handle of a bucket.

Figure 2: T1-weighted sagittal image shows the torn meniscal fragment (yellow arrow) adjacent and parallel to the posterior cruciate ligament (blue arrows) resulting in a “double posterior cruciate ligament sign”, associated with a bucket-handle meniscal tear.