

MRI Lower Extremity Joint

CPT: 73721, 73722, 73723

IMPORTANT NOTES

The requirement for Medical or Conservative Management prior to imaging is satisfied if the following are met:

- Nonsteroidal anti-inflammatory drugs for at least four weeks (Requirement is waived if NSAIDS are not tolerated or contraindicated, or if condition worsens while under treatment.)
- Activity modification or physical therapy if appropriate
- The reader is referred to VIDEOS IN CLINICAL MEDICINE Schraeder, Teresa L., Terek, Richard M., Smith, C. Christopher Clinical Evaluation of the Knee N Engl J Med 2010 363: e5;for a good discussion of the examination of the knee/

Arthrogram requires contrast 73222 73223

Ankle

Ligament sprain or tear

- Failed conservative management
- Surgery contemplated if positive

Hip

Labral tear suspected

Chronic hip pain

- Not responding to conservative management
- X-ray imaging not diagnostic

Knee

Joint Pain not responsive to conservative management

Loose body suspected TWO

Decreased ROM Locking of joint Pain

References

1. Padhraig F. O'Loughlin, Benton E. Heyworth, and John G. Kennedy Clinical Sports Medicine Update: Current Concepts in the Diagnosis and Treatment of Osteochondral Lesions of the Ankle Am J Sports Med February 2010 38:392-404;
2. SCHENCK, ROBERT C., JR., GOODNIGHT, JON MARC Current Concept Review – Osteochondritis Dissecans J Bone Joint Surg Am 1996 78: 439-56

Osteochondritis Dissecans See Loose body.

Residual or recurrent meniscal tears following meniscal surgery.

References

1. ACR Appropriateness Criteria® Nontraumatic Knee Pain
2. Lynne S. Steinbach, William E. Palmer, and Mark E. Schweitzer Special Focus Session: MR Arthrography Radiographics September 2002 22:1223-1246

Routine Imaging with or without contrast 73721 73722 73723

1 Major Symptom or Complaint presented as primary indication

1.1 Joint instability

1.2 Joint Locking

1.2.1 Suspect Loose Body

1.3 Mass, palpable, soft tissue or bone

1.3.1 X-ray and/or ultrasound nondiagnostic

1.4 Pain in joint, X-rays non diagnostic

1.4.1 Failed Conservative Management

1.4.2 Known Malignancy Elsewhere, suspect metastasis (Conservative Management NOT required)

1.5 Swelling

1.5.1 Failed Conservative Management

2 Working Diagnosis or Rule Out presented as primary indication

2.1 Avascular Necrosis Suspected, Pain in Joint and [ONE]

2.1.1 Alcoholism

2.1.2 Cushing's disease

2.1.3 History of pancreatitis

2.1.4 Sickle Cell disease

2.1.5 Steroid use in recent past (up to one year)

2.1.6 Systemic Lupus (SLE)

2.2 Fracture, suspected

2.2.1 X-rays non diagnostic on two occasions

2.3 Joint mouse See loose body

2.4 Loose body TWO

2.4.1 Decreased ROM

2.4.2 Locking of joint

2.4.3 Pain

References:

1. Padhraig F. O'Loughlin, Benton E. Heyworth, and John G. Kennedy Clinical Sports Medicine Update: Current Concepts in the Diagnosis and Treatment of Osteochondral Lesions of the Ankle Am J Sports Med February 2010 38:392-404;
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2.5 Meniscal Tear, Suspected X-ray nondiagnostic AND

2.5.1 Failed Conservative Management and TWO

2.5.1.1 Decreased ROM

2.5.1.2 Occasional joint locking

2.5.1.3 Positive McMurray test

2.6 Osteochondritis Dissecans See Loose body.

2.7 Osteomyelitis suspected

2.7.1 Pain or Fever AND One

2.7.1.1 C reactive Protein elevated

2.7.1.2 Elevated ESR

2.7.1.3 Fever

2.7.1.4 Leukocytosis

2.7.1.5 Positive Blood Cultures

References:

1. Parsonnet Jeffrey, "Chapter 120. Osteomyelitis" (Chapter). Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J: Harrison's Principles of Internal Medicine, 17th Edition: <http://www.accessmedicine.com/content.aspx?aID=2893649>.
2. Alok Kapoor, Stephanie Page, Michael LaValley, Daniel R. Gale, and David T. Felson Magnetic Resonance Imaging for Diagnosing Foot Osteomyelitis: A Meta-analysis Arch Intern Med, Jan 2007; 167: 125 – 132.
3. J. Herman Kan, Melissa A. Hilmes, Jeffrey E. Martus, Chang Yu, and Marta Hernanz-Schulman Value of MRI After Recent Diagnostic or Surgical Intervention in Children with Suspected Osteomyelitis Am. J. Roentgenol., Nov 2008; 191: 1595 – 1600.
4. Kuo-Chen Lee, Yi-Ting Tsai, Chih-Yuan Lin, and Chien-Sung Tsai Vertebral osteomyelitis combined streptococcal viridans endocarditis Eur. J. Cardiothorac. Surg., Jan 2003; 23: 125.
5. D Allen, S Ng, K Beaton, and D Taussig Sternal osteomyelitis caused by Aspergillus fumigatus in a patient with previously treated Hodgkin's disease J. Clin. Pathol., Aug 2002; 55: 616 – 618.
6. M Ida, H Watanabe, A Tetsumura, and T Kurabayashi CT findings as a significant predictive factor for the curability of mandibular osteomyelitis: multivariate analysis Dentomaxillofac. Radiol., Mar 2005; 34: 86 – 90.
7. Jyri K. Koort, Tatu J. Mäkinen, Juhani Knuuti, Jari Jalava, and Hannu T. Aro Comparative 18F-FDG PET of Experimental Staphylococcus aureus Osteomyelitis and Normal Bone Healing J. Nucl. Med., Aug 2004; 45: 1406 – 1411.
8. Susan A. Connolly, Leonard P. Connolly, Laura A. Drubach, David Zurakowski, and Diego Jaramillo MRI for Detection of Abscess in Acute Osteomyelitis of the Pelvis in Children Am. J. Roentgenol., Oct 2007; 189: 867 – 872.
9. Pain in Joint AVN Suspected SEE Avascular Necrosis

2.9 Pain in Joint, Metastases Suspected

2.9.1 Known Malignancy Elsewhere

2.10 Septic Joint

2.10.1 Pain And Any One

2.10.1.1 Fever, Leukocytosis, Edema

2.11 Stress Fracture Suspected

2.11.1 Localized pain, nondiagnostic repeat x-ray >7 days of symptoms

2.12 Tendinitis [Both]

2.12.1 Failed Conservative Management

2.12.2 Pain with motion

2.13 Torn Tendon or Ligament

2.13.1 Impaired ability to flex or extend joint, or hypermotility of joint

2.13.1.1 Failed Conservative Management

2.13.2 Palable gap in tendon

2.13.3 Evidence of tendon abnormality on Ultrasound

2.14 Tumor Suspected

2.14.1 X-ray and/or ultrasound nondiagnostic

3 Abnormal Physical Exam Finding presented as primary indication

3.1 Crepitus, Failed conservative management

3.2 Effusion, Failed Conservative Management

3.3 Joint instability

3.4 Joint line tenderness, Failed conservative management

3.5 Palpable Mass, soft tissue or bone

3.5.1 X-ray, CT or Ultrasound nondiagnostic

4 Abnormal Lab or Imaging presented as primary indication

4.1 Abnormality on Plain Film, suspicious for tumor, metastasis, infection (osteomyelitis), for avascular necrosis

5 Significant Prior Medical History presented as primary indication

5.1 Arthritis

5.1.1 Evaluation of joint prior to aggressive therapy, and interval follow up.

5.2 Fracture, complex

5.2.1 For treatment planning

5.3 Osteomyelitis Known

5.3.1 Interval follow up during and after treatment

5.3.2 Preoperative

5.3.3 Worsening clinical situation

References:

1. Parsonnet Jeffrey, "Chapter 120. Osteomyelitis" (Chapter). Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J: Harrison's Principles of Internal Medicine, 17th Edition: <http://www.accessmedicine.com/content.aspx?aID=2893649>.
2. Alok Kapoor, Stephanie Page, Michael LaValley, Daniel R. Gale, and David T. Felson Magnetic Resonance Imaging for Diagnosing Foot Osteomyelitis: A Meta-analysis Arch Intern Med, Jan 2007; 167: 125 – 132.
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7. Jyri K. Koort, Tatu J. Mäkinen, Juhani Knuuti, Jari Jalava, and Hannu T. Aro Comparative 18F-FDG PET of Experimental Staphylococcus aureus Osteomyelitis and Normal Bone Healing J. Nucl. Med., Aug 2004; 45: 1406 – 1411.
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5.4 Remicade or other aggressive therapy planned or interval follow up

5.4.1 Includes Anakinra, Enbrel, Humiria, Kineret, MabThera, Rituxan, Rituximab and methotrexate.

5.5 Trauma, Recent (< 4 weeks)

5.5.1 Nondiagnostic X-ray AND One

5.5.1.1 Effusion

5.5.1.2 Limited ROM

5.5.1.3 Pain

5.5.1.4 Swelling

5.6 Tumor, Known

5.6.1 Staging, restaging or interval follow up