

MRI Upper Extremity, Non Joint

CPT: 73218, 73219, 73220

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

1 Major Symptom or Complaint presented as primary indication

1.1 Mass, soft tissue or bone

1.1.1 X-ray, CT or Ultrasound nondiagnostic

1.2 Pain [BOTH]

1.2.1 X-ray and/or Ultrasound nondiagnostic

1.2.2 Failed conservative management

1.3 Pain post trauma

1.3.1 See Compartment Syndrome

2 Working Diagnosis or Rule Out presented as primary indication

2.1 Compartment Syndrome

2.1.1 Pain with passive stretching of muscle

2.1.2 Pain, more severe than expected from trauma

2.1.3 Paresthesias

2.1.4 Plulseless Paralysis

2.2 Fracture, suspected

2.2.1 X-rays non diagnostic on two occasions

2.3 Muscle tear or injury

2.3.1 Defect palpable

2.3.2 Pain on movement

2.3.3 Visible abnormality

2.4 Non union of known fracture Suspected

2.4.1 Movement at fracture site by PE,x-ray or statement of patient

2.4.2 No evidence of healing for at least 3 months

2.4.3 Pain

2.5 Necrotizing Fasciitis [Two] [Automatic Expedited Review by Physician Reviewer if Criteria are not met]

2.5.1 Pain

2.5.2 Swelling

2.5.3 Fever

2.5.4 Warm, shiny or discolored skin over the affected area

2.5.5 Elevated WBC count (Leukocytosis)

2.5.6 Lymphangitis and/or Lymphadenitis.

References:

1. Tubbs Robert J, Savitt Daniel L, Suner Selim, "Chapter 12. Extremity Conditions" (Chapter). Knoop KJ, Stack LB, Storrow AB, Thurman RJ: The Atlas of Emergency Medicine, 3e: <http://www.accessmedicine.com/content.aspx?aID=6003337>.
2. Fugitt JB, Puckett ML, Quigley MM, Kerr SM. Necrotizing fasciitis. RadioGraphics 2004;24 : 1472-1476

2.6 Stress or other fracture suspected ALL

2.6.1 Decreased or Painful Range of Motion (ROM)

2.6.2 Failed conservative management

2.6.3 Pain

2.6.4 X-rays nondiagnostic on two occasion

2.7 Tendinitis BOTH

2.7.1 Failed conservative management

2.7.2 Symptoms

2.7.2.1 Pain that with stretching

2.7.2.2 Tenderness

2.8 Tumor, suspected BOTH

2.8.1 Lesion on prior imaging

2.8.2 Pain

2.9 Torn Tendon or Ligament

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

2.9.1.1 Failed Conservative Management

2.9.2 Palable gap in tendon

2.9.3 Evidence of tendon abnormality on US

2.10 Osteomyelitis Suspected

2.10.1 Pain or Fever AND One

2.10.1.1 C reactive Protein elevated

2.10.1.2 Elevated ESR

2.10.1.3 Fever

2.10.1.4 Leukocytosis

2.10.1.5 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.

3 Abnormal Physical Exam Finding presented as primary indication

3.1 Mass, in soft tissue or bone

3.1.1 Prior imaging nondiagnostic (US or X-ray)

3.2 Palpable gap in muscle or tendon

3.3 Pulselss paralysis

4 Abnormal Lab or Imaging presented as primary indication

4.1 Imaging suggestive of bone destruction (tumor or osteomyelitis)

4.2 Mass of bone or soft tissue

5 Significant Prior Medical History presented as primary indication

5.1 Tumor, known ONE

5.1.1 Interval routine follow up of primary or metastatic tumor

5.1.2 New or worsening symptoms

5.2 Osteomyelitis Known

5.2.1 Interval follow up during and after treatment

5.2.2 Preoperative

5.2.3 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.
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.
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