CT Children's CLASP Guideline
Joint Pain with Swelling

INTRODUCTION

Joint pain in a child or adolescent can present with or without swelling. Swelling is indicative of an inflammatory response or reaction and can be intra- or extra-articular. Joint swelling may be associated with pain, stiffness and limited range of motion and can be indicative of a structural/mechanical (orthopedic), systemic inflammatory (rheumatologic) or infectious problem.

Differential Diagnosis for joint pain with swelling:

- **Acute onset swelling <u>with</u> injury mechanism:** Ligamentous, meniscal, cartilage tear or injury, joint sprain or strain (typically ankle), intra-articular fracture, patellar or joint dislocation
- **Acute onset swelling <u>without</u> clear injury:** Septic arthritis, Lyme disease, reactive arthritis/transient synovitis (post-viral/preceding illness), IgA Vasculitis [formerly known as Henoch-Schonlein Purpura (HSP)]
- **Insidious (over weeks to months) onset swelling (without injury):**
  - **Intra-articular:** Juvenile idiopathic arthritis (JIA), congenital discoid meniscus, osteochondral defect
  - **Extra-articular:** Bursitis, Osgood-Schlatter Disease, "overuse" injuries

INITIAL EVALUATION AND MANAGEMENT

INITIAL EVALUATION for JOINT PAIN WITH SWELLING:

- <u>Targeted History and Physical Exam:</u>
  - Determine if acute injury-related onset vs. insidious onset
  - Evaluate for intra-articular vs. extra-articular (periarticular) swelling, pain, limited ROM
  - Examine joints above and below the reported affected joint (for example, to differentiate reported knee pain from true hip pain such as in SCFE)
- <u>Useful x-rays to obtain based on affected joint as follows:</u>
  - ***Knee:*** AP & lateral views (for ALL patients), notch view (for ACL tears, tibial spine fracture, Osteochondritis Dissecans lesions), sunrise view (for patella dislocations)
  - ***Hip:*** Pelvis, AP, and frog leg lateral
  - ***Ankle:*** AP, lateral, and internal oblique
  - ***Elbow:*** AP, lateral, and internal oblique
  - ***Shoulder:*** AP & scapular Y, and axillary view (if suspecting dislocation)
- <u>Useful laboratory studies to consider:</u>
  - CBC, ESR, CRP, Lyme screen with reflex to Western blot
  - If systemic symptoms (fever, rash, weight loss, ill appearing, etc.) and concern for systemic autoimmune disease, contact Rheumatology to discuss (contact information below)

Note: Routine ANA testing is not useful in the diagnosis of arthritis and typically does not need to be included in screening laboratory studies unless systemic symptoms are present/suspicion of Lupus

	INITIAL MANAGEMENT: ▪ RICE (Rest, Ice, Compression, Elevation) ▪ Crutches if difficulty ambulating/cannot bear weight (**See Appendix A**: **Orthopedic DME Companies**) ▪ Splint or brace for stabilization if sprain, strain, or non-displaced closed fracture ▪ NSAIDs: Ibuprofen 10 mg/kg/dose Q6 hours (max dose: 600 mg/dose; max daily dose: 2,400/day) or Naproxen 5 mg/kg/dose Q12 hours (max daily dose: 1,000 mg/day) If sprain or overuse injury suspected and x-rays are normal, referral to Physical Therapy
WHEN TO REFER	**REFERRAL TO EMERGENCY DEPARTMENT:** ▪ Open fracture or obvious deformity ▪ Single joint pain or swelling associated with fever (concern for septic joint) ▪ Severe symptoms (e.g. ill appearing, severely abnormal labs, and/or inability to bear weight, ambulate or move extremity) – may call One Call to discuss with on-call Rheumatologist **URGENT REFERRAL TO ORTHOPEDICS (within 1 week):** ▪ Acute injury with notable swelling ▪ Acute injury with persistent limping or difficulty with ambulation ▪ Closed/non-displaced fracture in splint/sling ▪ Persistent complete inability to bend a joint (“locked knee”) **ROUTINE REFERRAL TO ORTHOPEDICS:** ▪ Persistent (non-severe) joint pain or swelling for more than 2 weeks following injury ▪ Mechanical symptoms such as joint locking or giving out **URGENT REFERRAL TO RHEUMATOLOGY (within 1-2 week):** ▪ Inability to ambulate or worsening severe joint pain with swelling without noted injury ▪ Multiple joints with pain and swelling associated with fever, rash, weight loss, significant laboratory abnormalities **ROUTINE REFERRAL TO RHEUMATOLOGY:** ▪ Joint swelling (with or without pain) with insidious onset, more chronic in nature ▪ Persisting or recurrent episode joint swelling (with or without pain) without mechanism of injury ▪ Lyme arthritis (typically single joint swelling, Lyme screen positive and ≥5/10 IgG bands on Western blot confirmation), refer if symptoms persist after completion of 28 days of antibiotic treatment (doxycycline or amoxicillin as per treatment guidelines) OR if symptoms recur. **DELAY REFERRAL (initial management by PCP per above) IF:** ▪ Underlying condition identified and treated ▪ Overuse injury suspected – plan to refer to Orthopedics or Sports Medicine if no improvement after 4 weeks of initial management/physical therapy ▪ Lyme arthritis as above

	General note on where to refer: **Refer to Orthopedics** if there is acute joint swelling with a clear mechanism of injury. There are 2 Orthopedic divisions that can care for children with joint swelling: Orthopedics and Sports Medicine. Both divisions can see patients of all ages. Typically, Orthopedics will see children and adolescents and Sports Medicine will see older adolescents with sports-associated injuries. **Refer to Rheumatology** if there is joint swelling without injury, particularly if there was a slow/insidious onset of symptoms, if multiple joints are involved or if Lyme testing was positive.
HOW TO REFER	**Referral to Orthopedics, Elite Sports Medicine, or Rheumatology (as noted above), Physical Therapy via CT Children's One Call Access Center** **Phone:** 833.733.7669 **Fax:** 833.226.2329 For more information on how to place referrals to Connecticut Children's, click **here**. ***Information to be included with the referral:*** ▪ Any pertinent lab results ▪ Any x-rays, MRI or other radiology images (actual images preferred over report alone)
WHAT TO EXPECT	**What to expect from CT Children's visit:** ▪ Focused physical examination ▪ Additional x-rays may be performed at the visit, x-rays are available in all of our offices ▪ MRI or other imaging may be considered and scheduled ▪ Potential referral to Physical Therapy ▪ Bracing or crutches may be suggested, as indicated ▪ Anti-inflammatory or other medications may be prescribed

APPENDIX A: Orthopedic DME Companies

- Rainbow Medical
  Address: 807 Wethersfield, Avenue, Hartford,
  Insurance: One of the only options for Husky patients
  Other: One of the better options for getting equipment same day/on a walk-in basis in the Hartford area

- Doyle's Medical; Covers Litchfield County (delivery as far as Farmington)
  Address: 25 Coe Place, Torrington
  Insurance: Accepts all insurances (Will NOT accept Husky for wheelchairs or hospital beds)
  Equipment: *Walker:* Junior and bigger *Wheelchair:* 12 inch, 14 inch, 16 inch, 18 inch and bigger. They carry Hospital Beds and Hoyer Lifts
  (P) 860-489-4415 (F) 860-489-8885

- Ellsworth Medical
  Address: 540 Windsor Avenue, Windsor
  Insurance: Medicaid and BlueCross only
  Equipment: Has no Pediatric Equipment. They carry Hospital Beds (rental only/private pay)
  Contact: (P) 860-298-9333 (F) 860-298-9248

- Home Health Pavilion (Office in Newington); can deliver on case by case
  Address: 87 Danbury Road, New Milford
  Insurance: Commercial/Husky
  Equipment: Pediatric equipment: Walker (Toddler, Child, and Junior). Wheelchairs all sizes. Carries Hoyer Lifts for under 100 pounds, Sleep Safe beds
  Contact: (P) 860-210-1313 x6072/6075 (F) 860-354-1123

- Medical Pharmacy; Windham county (From Waterford to Stafford)
  Address: 1213 Main Street, Willimantic
  Insurance: Accepts all insurances except Aetna, Oxford, Cigna
  Equipment: Has no Pediatric Equipment; Adult DME
  Contact: (P) 860-423-1661

- Lighthouse; Can deliver to home or family can pick up
  Address: 246 Terryville Road, Bristol
  Insurance: Does not accept Medicare, Aetna, CC, Cigna
  Equipment: Walkers: Junior walker in stock. Wheelchair: can order a wheelchair
  Contact: (P) 860-283-6248 (F) 860-506-4380

- Ford Pharmacy and Medical Supply; does Saturday delivery ; only delivers to Naugatuck Address: 2 Church Street, Naugatuck
  Insurance: Does not accept Medicare, Aetna, ConnectiCare, Cigna; not in network
  Equipment: Can take up to 3-5 business days. Pediatric Walkers, Wheelchairs: Order only
  Contact: (P) 203-729-2680 (F) 203-720-1626

- DME Living Well; delivery to hospital or home; cover all of CT
  Address: 297 East Center Street, Manchester
  Insurance: Does not accept Cigna, Aetna, ConnectiCare; not in network

Equipment: Pedi wheelchair: none in stock, Pedi Walkers: Junior rolling walker
Contact: (P) 860-674-1601 (F) 888-897-3010

- Free Equipment: Windham area
  Contact: WAIM Windham Area Interfaith Ministry (P) 860-456-7270
  Equipment: Call to see what they have in stock

Bariatric Equipment:

- Size Wise; delivery to home
  Insurance: Does not take Blue Cross
  Equipment: Bariatric Equipment: Wheelchair: 24", 34" and 26"-36"
  Contact: (P) 203-284-1588, Customer Services # 1800-814-9389, Sales Representative # 203-627-6870, (F) 203-284-1787

- CHARM Medical Supply; No delivery, it is pick up mostly
  Address: 141 South St, West Hartford
  Insurance: Medicaid and Blue Cross
  Equipment: Pedi Walkers: Can order. Pedi wheelchair: Can order; may take time 3-5 business to get in stock. Bariatric Equipment: some wheelchairs and walkers in stock but can order any size.
  Contact: (P) 860-967-3560 (F) 844-639-9655