

# 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 with injury mechanism:** Ligamentous, meniscal, cartilage tear or injury, joint sprain or strain (typically ankle), intra-articular fracture, patellar or joint dislocation
- **Acute onset swelling without clear injury:** Septic arthritis, Lyme disease, reactive arthritis/transient synovitis (post-viral/preceding illness), 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:

- Targeted History and Physical Exam:
  - 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)
- Useful x-rays to obtain based on affected joint as follows:
  - **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)
- Useful laboratory studies to consider:
  - CBC, ESR, CRP, Lyme screen with reflex to Western blot
  - If systemic symptoms (fever, rash, weight loss, ill appearing, etc.), add to above: CMP (LFTs), ferritin, LDH/uric acid, consider blood culture, consider ANA

*\*\*Note: 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  $\geq 5/10$  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