Management Of An Isolated Supracondylar Humerus Fracture
Outpatient

Caregiver Initiated Protocol
- Apply Ice To Affected Area If Injury Is Less Than 24 Hours Old.
- Elevate Affected Limb
- Place Affected Limb In Position Of Comfort And Immobilize Appropriately.
- Manage Pain Per Policy Caregiver Protocol
- X-Ray Per Caregiver Initiated Protocol

Supracondylar Humerus Fracture Types

Type I: Non-Displaced Fracture & NO Vascular Compromise
Type II: Displaced With Intact Posterior Cortex – Call Transfer Center
Type III: Displaced With Disrupted Posterior Cortex - Call Transfer Center And Transport To SR Or ECH ED

Assessment Of Fractures
- Remove All Dressings & Visualize Area
- Assess For Displacement
- Neuro Vascular Status (PNV)
- Soft Tissue Swelling
- Soft Tissue Envelope

Prompt Evaluation Should Occur As Indicated By Patient Condition

Indicators For Emergent Surgical Intervention
- Soft Tissue Envelope Disruption
- Disvascular Hand

Neuro Vascular Checks
- Capillary Refill In Hand/Fingers And Intact Radial Ulnar Pulse
- Normal Sensation And Motor Function In Median, Radial, And Ulnar Nerve Distribution
  (see Motor Function Pictures)

Discharge Criteria
- Neuro Vascular Status Intact
- Soft Tissue Swelling Not Impeding NV Status
- Comfortable On Oral Pain Medications

Vascular Consult
If The Patient Is At SR And The Ortho Attending Determines There Is A Need For A Vascular Consult:
- Notify The ED Trauma Physician And The Covering Orthopedic Attending For ECH
- Transfer The Patient To ECH
- All Communication Should Be Orthopedic Attending To Orthopedic Attending

FOR NAT SUSPECTED CASES, PLACE CHILD ADOVACACY MEDICAL ORDER AFTER PATIENT IS ADMITTED TO FLOOR

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Management Of An Isolated Supracondylar Humerus Fracture

**Type I: Non-Displaced Fracture & NO Vascular Compromise**
- ED Cast Placement
- Splint Management
- Pain Management
- Provide Sling

**Type II: Displaced With Intact Posterior Cortex**
- Consider Closed Reduction With Sedation
- Splint In ED/UC
- Check NV Status
- Pain Management
- Provide Sling

**Type III: Displaced With Disrupted Posterior Cortex With Concern For Vascular Status**
- Provide Sling
- Pain Management
- Assess Vascular Status
- Stabilize For Pain Management
- Apply Splint

<table>
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<th>First Disposition From ED/UC</th>
<th>Surgical &amp; Post Op Care</th>
<th>Discharge Criteria</th>
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<tr>
<td>Home</td>
<td>None</td>
<td>Neurovascular Status Intact</td>
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<tr>
<td>ED/UC - Home If Appropriate</td>
<td>Initiate CRPP Order Set</td>
<td>Soft Tissue Swelling Not Impeding NV Status</td>
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<td>Discharge Home For CRPP</td>
<td>Pre-Op Check List</td>
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<td>If Same Day Surgery UC</td>
<td>Monitor Post Op: NV</td>
<td>ED Case Management Referral Ordered</td>
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<td>Transfer To Hospital</td>
<td>Status, Pain Management, Soft Tissue Swelling</td>
<td>Elevate Extremity With Ice</td>
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<td>Admit For Closed Reduction &amp; Percutaneous Pinning (CRPP)</td>
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<td>Admit For CRPP For Emergent Surgery</td>
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</tbody>
</table>

**Discharge Criteria**
- Neurovascular Status Intact
- Pain Controlled With Oral Pain Medication
- ED Case Management Referral Ordered

**Importance Of Follow-Up**
- With Orthopedic Physician
- Cast Care
- Fracture Care
- Medication Administration
- Splint Teaching Sheet

**Education**
- Follow-Up With Ortho In 5-7 Days
- Provide Pediatric Orthopedic Surgeon Resource List (Blue Sheet)
- Pain Management – Provide Prescription On Discharge
- ED Case Management As Appropriate

**Discharge Instructions Follow-Up**
- Follow-Up With Ortho In 5-7 Days After Injury With Ortho Surgeon Or Per Ortho Surgeon
- Provide Pediatric Orthopedic Surgeon Resource List If Appropriate
- Pain Management
- ED Case Management

- Follow-Up Per Orthopedic Surgeon
- Pain Management

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Peripheral Neurovascular Assessment (PNV Assessment)
Upper Extremities—3 Nerves (Assess Motor & Sensation)

**MOTOR ASSESSMENT**

- "Spread your fingers like a flower"
  Assesses radial & ulnar nerves

- Claw your hands like a bear"
  Assesses radial nerve

- Thumbs up like you’re cool"
  Assesses radial nerve

- “Then bend it in the middle”
  Assesses anterior interosseous branch of median nerve

- "Make a fist"
  Assesses median nerve

**SENSATION ASSESSMENT**

- Assess ability to feel light touch
- Grade as normal or decreased
- Assess sensation to index finger (median nerve), pinky finger (ulnar nerve) and mid hand between thumb and index finger (radial nerve)

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