**Approach to Limb Injury**

### Check ABCs, screen for other injuries & rule out other trauma
- Check the airway, breathing, and circulation.
- Assess for any other injuries present.
- Rule out any other trauma-related issues.

### Assess for RED flags with PE & Hx (screen for non-accidental injury in Peds)
- **Pain**
- **Red** (conjunctival or mucosal changes)
- **Edema**
- **Deformity**
- **Tingling/paresthesia**

### Open Fracture
- **Early antibiotics & control bleeding**
- **Neurovascular & soft tissue assessment (see below if abnormal)**
- **Dress wound & immobilize with splint**
- **Prompt surgical consult**

### Neurovascular Compromise
- **Urgent reduction needed (before x-ray)**
- **Document full neurovascular assessment BEFORE reduction**
- **Obtain consent; analgesia if time**
- **Repeat neurovascular assessment AFTER to determine success**
- **Immobilize with splint, x-ray & discuss with consultant**

### Signs of Compartment Syndrome (CS)
- **Document presence of CS signs (pain out of proportion with passive stretch/muscle contraction; swollen compartment; paresthesias; weakness/paralysis; pallor; pulseless)**
- **Limb AT level of heart & remove constricting items**
- **Urgent surgical consult**

### Dislocation
- **Consult for radiographic confirmation & treatment planning (e.g. Dynamed, orthobullets.com etc.)**

### Fracture Present
- **Describe X-RAY: Anatomy, # Pattern (transverse, oblique, spiral, comminuted, segmental, avulsion), Articular Involvement (Ortho referral), Apex Angulation (medial or lateral; angle of distal in relation to proximal), Rotation (internal or external), Distracted or Impacted, Shortening, Displacement**
- **Consult resources for unique # reduction & mgmt:**
  - (e.g. Dynamed, orthobullets.com etc.)

### Fracture Absent
- **Tendon ligament injury; completely torn (refer).**
- **May be injury to cartilage.**

### Physiotherapy referral & provide guidance to regain strength & ROM.

<table>
<thead>
<tr>
<th>Upper Limb</th>
<th>Lower Limb</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nerve</strong></td>
<td><strong>Motor</strong></td>
</tr>
<tr>
<td>Axillary</td>
<td><strong>Abduct shoulder</strong></td>
</tr>
<tr>
<td>Musculocutaneous</td>
<td><strong>Elbow flexion</strong></td>
</tr>
<tr>
<td>Radial</td>
<td><strong>Wrist extension</strong></td>
</tr>
<tr>
<td>Median</td>
<td><strong>Oppose thumb &amp; little finger</strong></td>
</tr>
<tr>
<td>Ulnar</td>
<td><strong>Abduct fingers</strong></td>
</tr>
<tr>
<td>Femoral</td>
<td><strong>Knee extension</strong></td>
</tr>
<tr>
<td>Deep Fibular</td>
<td><strong>Foot dorsiflexion &amp; inversion; toe extension</strong></td>
</tr>
<tr>
<td>Superficial Fibular</td>
<td><strong>Foot eversion</strong></td>
</tr>
<tr>
<td>Tibial</td>
<td><strong>Knee flexion; foot planar flexion; toe flexion</strong></td>
</tr>
</tbody>
</table>