Position the patient prone on an exam table with the affected arm hanging downward. Place a folded towel under the shoulder. Wrap gauze snugly around the wrist of the affected arm. Hook weights or sandbags into the gauze. Allow weights to pull on arm for 15 to 20 minutes. If there is no progress after 15 to 20 minutes, apply a sling and refer to an orthopedic surgeon. If the reduction is successful, apply a sling and swath.

Method 2: Manual reduction. Position the patient in a seated position. Grasp the wrist and elbow of the affected arm. With the arm against the body, flex the elbow 90 degrees. Externally rotate the arm to approximately 70 to 85 degrees or until you feel resistance. Lift the elbow in the sagittal plane as far as possible. Internally rotate the arm. The head of the joint should slip into place, and the pain will immediately decrease. Apply a sling and swath to immobilize the shoulder.

Method 3: Rapid method reduction. Position the patient seated upright in a chair as straight as possible. An assistant should help maintain the patient in an upright position by standing adjacent to the unaffected shoulder and clasping his or her hands around the chest in the axilla of the affected side. Place a stockinette loop around the proximal forearm of the involved extremity with the elbow flexed at 90 degrees. Place your foot in the stockinette loop to provide firm, gentle downward traction and slight external rotation of the affected arm as needed until reduction is obtained. If successful, apply a sling and swath.

Posterior shoulder dislocation reduction: Do not attempt to reduce. Refer to an orthopedic surgeon.

Acromioclavicular (AC) shoulder dislocation reduction: No active reduction needed. Apply sling for 1 week or until the pain subsides. Patient should avoid overhead work.

Elbow Dislocation

Apply continuous gentle downward traction to the proximal portion of the forearm and bring the elbow into flexion. Have an assistant apply countertraction on the distal humeral shaft. Apply a posterior splint with the elbow at 100 to 110 degrees of flexion.

Radial head subluxation (nursemaid’s elbow): One method is to supinate the wrist and forearm and flex the elbow. The other method is to hyperpronate the wrist and forearm. Flexion of the elbow is not required. The patient should wear an ACE wrap on the elbow for 1 or 2 days.

Hand Dislocation

Metacarpal (MCP) joint dislocation reduction: Hyperextend the finger at the MCP joint. Apply traction by pulling the finger outward and upward. Apply pressure on the dorsal aspect of the base of the proximal phalanx. Remove traction. Flex the finger. Re-x-ray the hand to determine success. Assess neurovascular status and range of motion.

Apply a posterior splint with MCP flexed 70 degrees. Keep the posterior splint in place for 3 to 4 weeks.

Dorsal proximal interphalangeal (PIP) joint dislocation reduction: Perform a digital nerve block. Apply direct longitudinal traction. Apply a dorsal extension block splint, blocking the last 15 degrees of extension. Keep splint in place for 3 to 4 weeks.

Volar PIP joint dislocation reduction: No active reduction is required. Splint in full extension of PIP joint on the volar side. Keep splint in place for 4 to 6 weeks.

Thumb dislocation reduction: A ligament tear is usually involved. Refer to an orthopedic surgeon.

Knee Dislocation Reduction

Position the patient on the examination table supine or sitting. Pull outward and straighten the leg. The patella will move into alignment. Immobilize the knee.

Postprocedure Care

After confirming reduction with x-ray and immobilizing the joint properly, provide the instructions in Table 3 to prevent further injury and strengthen muscles.

Table 3

<table>
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<th>JOINT</th>
<th>INSTRUCTIONS</th>
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| TMJ | Eat soft food for several days. Avoid opening the mouth wide for 3 to 4 weeks. Place your hand under your chin when yawning. Take acetaminophen every 4 hours as needed for pain. Perform jaw-muscle strengthening exercises:  
  - Assisted opening — Place 2 fingers on lower front teeth. Slowly open mouth while pushing down with fingers. Repeat 10 times.  
  - Resisted opening — Place palm under chin. Open mouth slowly while gently pushing up with hand under chin. Repeat 10 times.  
  - Lateral movement — Open mouth 1 inch. Move lower jaw from side to side. Ten times to left and 10 times to right. |
| Shoulder | Apply ice 20 minutes on, 20 minutes off for the first 48 hours. NSAIDs every 6 hours as needed for pain and inflammation. Oral narcotics if needed for severe pain. Do not raise arm in any direction above 45 degrees until seen by an orthopedic surgeon. Passive exercises should be started immediately, as pain tolerance allows:  
  - Bend at waist with arm hanging down; move arm in circle.  
  - With arm against body, bend arm to 90 degrees and back.  
  - Lean over with affected arm hanging and make increasingly larger circles clockwise and counterclockwise.  
  - Standing upright with affected arm flexed 90 degrees at the elbow, make a fist with the thumb up. Move the forearm and hand, rotating at the elbow to and away from the body.  
  - Standing upright with affected arm flexed 90 degrees at the elbow, make a fist with the thumb up; raise the arm at the shoulder in abduction.  
  - Return to the office in 1-2 weeks for recheck. |
| Elbow | Take acetaminophen every 4 hours as needed for pain. Return to the office in 1 week. Start range-of-motion exercises in 1 week if the elbow is stable. Gradually increase range-of-motion exercises after 10 to 14 days. Keep the splint in place until full extension is achieved. A follow-up x-ray is needed in 2 to 3 weeks to determine stability of the elbow. |
| Hand Dislocation - MCP and PIP Dorsal | Take acetaminophen every 4 hours as needed for pain. Return to the office in 1 week. Start flexion and extension exercises in 1 week. The splint can be removed in 3 to 4 weeks. |
| Hand Dislocation – PIP Volar | Take acetaminophen every 4 hours as needed for pain. Return to the office in 1 week. Keep the splint in place for 4 to 6 weeks. After 4 to 6 weeks, start flexion and extension exercises. |
| Knee | Take acetaminophen every 4 hours as needed for pain. Return to the office in 1 week. Start flexion and extension exercises in 1 week. The immobilizer can be removed in 3 to 4 weeks. |

References