

Dance Related Injuries: Elbow, Wrist and Hand

Carpal Tunnel Syndrome

Epicondylitis

1. See also Epicondylitis (ortho)
2. Lateral:
 - Symptoms:
 - Difficulty holding onto objects or a decrease in strength with partnering
 - Most common overuse syndrome in primary care
3. Medial:
 - Symptoms:
 - Difficulty or pain with holding onto objects, shaking hands or turning doorknobs
4. Technical tips for dancers:
 - Keep arm muscles strong so they can absorb energy of sudden stress
 - Learn proper technique for activities that require forearm motion
 - After repetitive movements of arms, stretch entire
 - Difficult to minimize repetitive movements with dance so may need proper analysis of technique with lifting or postural analysis

Thoracic Outlet Syndrome

1. See also Thoracic Outlet Syndrome (ortho)
2. Dance contributing factors:
 - Repetitive activities involving a forward-head posture or drooped shoulders
 - Partnering dance movements involving awkward neck and shoulder movements
 - Carrying heavy loads, cases, dance bags
 - Trauma to the neck or shoulder
3. Symptoms:
 - Arm or hand numbness, tingling, a cold sensation or pain
 - Generalized weakness or fatigue in the arm or hand muscles
4. Differential diagnosis:
 - Herniated disc in the neck
 - Carpal tunnel syndrome
 - Cubital tunnel syndrome
 - Bursitis of the shoulder
5. Imaging studies:
 - X-ray
 - Evaluate for cervical ribs
 - Arteriogram
 - Rule out vascular compromise
 - MRI
 - Assess involvement of the spinal cord or nerve roots
 - Nerve conduction
 - Assess severity of nerve injury
6. Treatment:
 - Brachial plexus involvement requires surgery

- Other forms treated conservatively:
 - NSAIDs
 - Postural awareness
 - Technique modification
 - Physical therapy to increase range of motion of neck, shoulders, strengthen muscles, and induce better posture
7. Technical Tip:
- Active recovery (stretching during rest breaks) may reduce risk of developing symptoms
 - Elite and professional dancers may benefit from therapists who frequently work with dancers

Wrist Dislocation

1. See also Wrist Dislocations (ortho)
2. In dancers typically involves displacement lunate bone
3. Symptoms:
 - Excruciating pain at time of dislocation
 - Loss of hand and wrist function
 - Visible deformity possible
 - Numbness or paralysis below dislocation
4. Treatment:
 - May require surgery referral
 - Rest, ice, NSAIDs
 - Immobilization for 2-8 weeks
 - Complete healing-requires at least 6 weeks
 - Physical therapy to restore full functional strength and motion in hand/wrist
 - Dancer may need to support wrist with tape or brace upon initial return to activities

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