



Care and Prevention of Common Dance Injuries

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- I. Common Dance Injuries
 - A. Spine
 1. Cervical--10% of spine dance injuries
 - a. most often strains and spasms of muscles and tendons at the neck, top of the shoulders and base of the head
 - b. small incidence of disc problems
 2. Thoracic--20% of spine dance injuries
 - a. strains of the muscles, tendons and/or connective tissue
 - b. limited mobility of ribs and intercostals causing impingement
 - c. vertebral or disc problem
 3. Lumbosacral--70% of spine dance injuries
 - a. mechanical low back pain, primarily due to:
 - Poor stabilization
 - Hyperlordotic posture / scoliosis
 - Muscle imbalance with weakness and tightness
 - Poor technique by flexing hip and increasing lordosis
 - Poor technique in positions derriere
 - Possible rotation of lumbar vertebrae
 - Hyper / hypomobility
 - Uneven leg length
 - High heels
 - Gynecological problem
 - b. sacral or pelvic rotations
 - c. disc problems
 - d. stress fractures
 - B. Hip and thigh
 1. Apophysitis vs. avulsion / stress fracture
 - a. inflammation of front of hip bone (ASIS)
 - b. pain with developpe and battement
 - c. most often due to:
 - Tight hip flexors / anterior pelvic tilt / weak lower abdominals
 - Posterior pelvic tilt / pushing hip forward
 - Lifting hip with movements (i.e. passé, developpe)
 - Gripping iliopsoas on dance movements



Holding turnout with anterior hip muscles
Anterior femoral head / iliofemoral ligament rubbing

2. Snapping hip

- a. anterior--often from snapping of the iliopsoas tendon, but can also be from inflammation within the hip
- b. lateral--also called iliotibial band friction syndrome proximally from rubbing of the ITB and TFL over the hip
- c. commonly due to:
 - Generally same as apophysitis
 - Sinking into supporting hip
 - Poor turnout technique, over-utilizing lateral muscles vs. rotators
 - Overpronation / oversupination

C. Knee

1. Patellofemoral syndrome

- a. general discomfort around the patella most often due to mechanical problems from either technique, muscle imbalance, or structural
- b. can be due to chondromalacia or actual roughening of the undersurface of the patella
- c. usually the result of:
 - Poor turnout technique
 - Muscular imbalances in posterior and anterior thigh
 - Hard floor
 - Not sinking into heels on jumps
 - Excessive kneeling
 - Overpronation
 - Decreased hip external rotation / VMO strength
 - Tight ITB / calves / hip flexors / hamstrings
 - Short demi-plie

2. Tendinitis

- a. most often at either at the patella tendon just below the patella or at the pes anserinus attachment for the hamstring tendons at the lower inside of the knee
- b. can be due to overuse or the same mechanical problems as with PF

D. Leg

1. Shin splints vs. stress fractures

- a. pain in the anterior medial shin and arch



- b. shin splints can progress into stress fractures due mostly to continuing to dance through pain, but also if other risk factors are there (i.e. amenorrhea, anorexia nervosa)
- c. pain in releve, demi and grande plie, and jumps
- d. commonly due to:
 - Increased pronation
 - Improper turnout / jumping / pointe technique
 - Lateral ankle weakness or instability
 - Decreased strength of hip external rotators
 - Decreased movement of the talus, calcaneus, midfoot
 - Hard floor

E. Ankle

1. Achilles tendonitis

- a. pain and often visible inflammation of the Achilles
- b. pain over the Achilles especially with tendu, releve, pointe and jumps
- c. often due to:
 - Rolling in or out while on pointe
 - Incorrect tendu or releve technique
 - Forced pointe
 - Tight heel cord / calf muscles
 - Increased pronation
 - Not sinking on heels when jumping
 - Poor placement of pointe shoe ribbon
 - Decreased movement of joints in foot

2. Ankle sprains

- a. stretching and / or tearing of some or all of the lateral ankle ligaments
- b. if injured in a noncontact situation, can often be due to:
 - Decreased strength of peroneals
 - Lower leg muscle imbalances
 - Muscle and general fatigue
 - Poor pointe / releve technique
 - Ligament laxity
 - Extrinsic factors (i.e. slippery floor, stage props)

F. Foot

1. Bunions, neuromas, corns, callouses

- a. often due to inadequate care of general foot health (i.e. wearing



poorly fitting shoes during day and at dance, not addressing problems as they arise, not padding adequately)

2. Plantar fasciitis

- a. pain along bottom of foot, most often near the base of the heel
- b. pain on jumping, releve, and sometimes tendu
- c. pain first thing in the morning
- d. usually due to:
 - Poor turnout technique
 - Not sinking heels on jumps
 - Decreased hip external rotation strength
 - Pronation issues (prolonged or landing from jumps in this position)
 - Tight calf muscles / equinus foot

3. Stress fractures

- a. pain in very specific points of the foot
- b. pain with weightbearing positions and occasionally at rest

II. Injury care

1. RICE principles

- a. Rest as needed
- b. Ice for 10-15 minutes, 3 times a day initially for the first 3-5 days
- c. Compression, if an acute injury with swelling
- d. Elevation, above the level of the heart if swelling present

2. When to see a physician

- a. any injury which takes you away from dance for more than 3 days or makes you modify your classes and/or technique repeatedly for more than a week should be evaluated by a physician

3. Modified activity

- a. whenever possible and appropriate
- b. can perform other activities to maintain conditioning (i.e. cardiovascular exercise, Pilates, floor / bar work)

4. Return to dance principles

- a. go slow and slowly increase
- b. practice the "next day" rule: Any new activity or load may increase symptoms that day or evening, so ice it and rest it. If it



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is still sore the next day or a couple of days following, then you have done too much

III. Injury prevention

1. Proper warm-up and stretching principles
2. Improved body awareness
 - a. proper techniques and teaching
3. Warning signs of a potential problem
4. Good foot care (i.e. padding, stretching, massaging)