Kissing Spines-interspinous sprain
1. Definition:
   - Condition in which the spinous processes of adjacent vertebrae are touching
   - Also known as Baastrup's disease
2. Causes:
   - Traumatic injuries involve sudden, forceful flexion of spine
   - Degenerative changes in interspinous ligaments along tips of spinous processes of vertebrae
3. Symptoms:
   - Pain and limitation with both flexion and extension
   - Can affect cervical vertebrae but most commonly affects lower lumbar vertebrae in dancers
4. Treatment:
   - Conservative therapy with ice, rest, NSAIDs
   - Physical therapy to help dancer regain strength and mobility of deficits
   - Education of dancer in proper body mechanics during everyday tasks to prevent unnecessary stress or re-injury
   - Symptoms usually decrease after three days. Should subside between 1-6 weeks
   - Dancers may return to full class or performance when pain free

Scheuermann's Disease
1. Definition:
   - Osteochondrosis that presents as an abnormality of the vertebral epiphyseal growth plates
   - Marked by an increase convexity of the back in thoracic area
   - Sometimes known as "round back"
   - Scheuermann's kyphosis is rigid
2. Symptoms:
   - Pain is generally gradual, located over spinous processes and worst at end of day
3. Diagnosis:
   - Visual inspection
   - Range of motion of the spine
   - Leg length discrepancy
   - Gait
   - Thorough neurological and musculoskeletal exam
   - Radiographic findings may include:
     - Vertebral wedging of five degrees or more on three adjacent vertebral bodies
     - End-plate changes
     - Disk-space narrowing
4. Treatment:
   - Rest, NSAIDs, physical therapy for muscle strengthening and flexibility
   - Bracing may be helpful
   - Surgical fusion of the spinal column in severe cases
**Spondylolysis**

1. **Definition:**
   - Stress fractures of pars interarticularis of spine

2. **Causes:**
   - May occur in dance as a result of repetitive microtrauma during extremes of flexion, extension, and rotation

3. **Symptoms:**
   - Activity related back pain exacerbated by hyperextension of lumbar spine

4. **Physical exam:**
   - Hyperlordotic posture
   - Limited range of motion
   - Hamstring tightness
   - Tenderness or pain in during single-leg hyperextension - "stork" test

5. **Imaging studies**
   - **X-rays:**
     - Classic appearance on oblique view "Scotty dog" with "collar appearance"
   - **Lumbosacral Bone Scan with SPECT** if diagnosis uncertain after obtaining radiographic images

6. **Treatment:**
   - Relative rest
   - Physical therapy
   - Possible bracing until healing and dancer is asymptomatic
     - May take up to three months

**Spondylolisthesis**

**Herniated Disc**

1. Can see with trauma-falls or repetitive strain of lumbar spine with dance

**Sacroiliac Joint Sprain**

1. **Causes:**
   - Prolonged bending and lifting

2. **Physical exam:**
   - **FABER Test** (consisting of hip flexion, abduction and external rotation) causes pain in sacroiliac joint
     - Specific for sacroiliac joint pathology
     - Place ipsilateral ankle on contralateral knee in supine patient and put gentle downward pressure on the knee

3. **Treatment:**
   - Rest, NSAIDs, physical therapy to assist with joint mobilization, stretching and strengthening

**References**

   http://www.podiatrytoday.com


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