

Case Study: Adolescent Ballet Dancer

PATIENT PROFILE

- Name: Victor | Age: 16 | Occupation: Pre-professional ballet dancer
- Institution: Royal Ballet School | Background: Recent arrival from Brazil (4 weeks)
- Training Load: 25-30 hours/week of dance activities

PRESENTING COMPLAINT

Primary Symptoms

- Low back pain (LBP): 1-4/10 NPRS, fairly constant post-incident
- Right anterior groin pain: 1-7/10 NPRS, more severe than back pain

Onset & Mechanism

- Sudden onset during double cabriole jump
- Acute presentation (1-week history)

PAIN CHARACTERISTICS

- Aggravating Factors: Hip flexion, walking, stairs, prone position
- Relieving Factors: Rest (5 minutes), supine position, Ibuprofen

Associated Symptoms:

- Morning stiffness (15 min)
- No numbness/paraesthesia
- Sleep disturbance (1-2x nightly)

PSYCHOSOCIAL FACTORS

- Language barrier (Portuguese primary)
- New to school environment
- High stress due to:
 - Performance pressure
 - Inability to dance
 - Recent relocation
- No prior injuries
- Otherwise healthy

CLINICAL CONSIDERATIONS

1. Age-Related:

- 16-year-old in developmental phase
- High-intensity training impact

2. Risk Factors:

- Extensive repetitive movements - Potential joint/nerve complications, - Possible femoral nerve involvement , - No sensory/motor deficit

DIAGNOSTIC CONSIDERATIONS

PRIMARY DIFFERENTIAL DIAGNOSIS

- Lumbar radicular pain with femoral nerve involvement
 - Pattern consistent with nerve root irritation
 - Presentation matches femoral nerve distribution
 - Pain characteristics support neural involvement

SECONDARY CONSIDERATIONS

Critical Rule-Outs

1. Pars Defect

- Age-appropriate concern
- High-level repetitive activity
- Requires specific management approach

MANAGEMENT IMPLICATIONS

1. Immediate needs:

- Pain management
- Activity modification
- Sleep optimization

2. Diagnostic requirements:

- Comprehensive physical examination
- Possible imaging studies
- Neural tension testing

3. Long-term considerations:

- Training load management
- Technique modification
- Prevention strategies

Note: This case requires careful evaluation due to the patient's age, activity level, and presentation pattern. Early intervention and appropriate imaging may be necessary for optimal outcomes.