Chapter 6 – Management Protocols

2

Lumbar Disc Lesion
Lumbar Musculoskeletal Lesions

Management Protocol

TYPE OF CONDITION: Acute

MECHANISMS OF INJURY

1. Traumatic: Examples may include:
   a. acute excessive rotation (lifting or pulling): sprain/strain/disc herniation
   b. violent hyperflexion: compression fracture, disc herniation
   c. falling from height, landing on feet/buttocks: compression fracture, facet injury

2. Repetitive: Examples may include:
   a. coupled motions
      1. rotation or lateral bending with flexion: discs, muscle, ligament injury
      2. lateral flexion with rotation and compression: discs, muscle, ligament injury
   b. singular motions
      1. extension: tension stress on anterior spinal ligaments, facet injury
      2. flexion: tension stress on posterior spinal ligaments and muscles
   c. postural
      1. hyperlordosis with compression and injury to facet joints
      2. DDD / DJD: Disc and facet stress due to uneven distribution of force
      3. hypolordosis with stress on posterior ligaments and muscles and excessive disc compression

COMPLICATING FACTORS

Phases may be prolonged by complicating factors that may include diabetes, lack of exercise, obesity, weak abdominal musculature, failed surgical procedures, history of previous injury, etc., as well as socioeconomic obstacles for noncompliance with schedule of care (e.g. inability to get time off work, inability to afford treatment).
MANAGEMENT PLAN

PHASE 1: Acute Traumatic / Acute Exacerbation

Plan of care may include:
1. Specific chiropractic adjustments to the lumbar spine and associated subluxations
2. Ice: 15-20 minutes, 3 times daily (see Chapter 4 - 1). Provide patient with Cold Therapy handout
3. EMS: IFC at 80-120 Hz for 15-20 minutes until resolution, can be used hourly (see Chapter 4 - 4)
4. Avoid exacerbating activities
5. Lumbo-sacral bracing: depending upon severity of the condition
6. Instruction for activities of daily living (ADLs)

Time Frame: 3-4 days

Goals: Upon re-examination: Decrease pain and inflammation, increase mobility, reduction of subluxations, improve ROM, and other objective findings

PHASE 2: Sub-Acute

Plan of care may include:
1. Specific chiropractic adjustments to lumbar spine and associated subluxations
2. Active range of motion exercises
3. Postural training
4. Therapeutic modalities
   a. 2 days at 1-150 Hz – 15-20 minutes with ice
   b. 2 days at 1-15 Hz – 15-20 minutes with ice
   c. 3 days US continuous at 1.0 w/cm2 for 5-8 minutes
5. Instruction for activities of daily living (ADLs)

Time Frame: 1 to 2 weeks

Goals: Upon re-exam: 50% reduction in pain and inflammation, improvement of function, patient understanding of ADLs, reduction of subluxations

PHASE 3: Chronic

Plan of care may include:
1. Specific chiropractic adjustments to the lumbar spine and associated subluxations as needed (1-2 times per week to once every 2 weeks)
2. Continue active range of motion exercises and postural training
3. Rehabilitative exercise (see Chapter 5)
   a. Resisted active exercise
   b. Balance, coordination, and proprioception
4. Ice: 15-20 minutes post exercise if indicated
5. Improve/maintain total body conditioning

**Time Frame:** 2 to 8 weeks

**Goals:** Upon re-exam: 60 - 80% reduction in symptomatology, increased stability of the lumbar spine, reduction of subluxations

**PHASE 4:** Reconditioning

**Plan of Care**
1. Specific chiropractic adjustments to the lumbar spine and associated subluxations
2. Progression of lumbar strengthening and stabilization program
3. Progressive incorporation of work/play activities
4. Education/retraining of proper body mechanics (lifting, etc.)
5. Maintenance of total body conditioning
6. Evaluation of candidacy for supportive/corrective orthotics

**Time Frame:** 8 to 16 weeks, follow up assessments every 2 to 6 weeks until maximum patient improvement

**Goals:** Upon re-exam: 100% reduction of pain and inflammation, improved strength, improved stability, restoration of function, improved skills, and improved kinesthetic awareness, reduction of subluxations.

**LIGHT DUTY WORK/PLAY CRITERIA**

1. Minimal aggravation of symptomatology
2. Minimal chance of increased structural damage or re-injury

**RETURN TO WORK/PLAY CRITERIA**

1. Complete resolution of pain at rest
2. Minimal aggravation of symptoms during work/play
3. Restoration of function to pre-injury status or maximal stability
References Consulted


