# **Cervical DDD**

Degenerative disc disease is a common condition that affects aging adults. The intervertebral discs serve as shock absorbers for the spine. Over time these discs can gradually dry out, affecting their strength and resiliency. As the degenerative process continues, the disc will begin to lose height and become stiff. This can lead to any number of problems and/or pain generators such as: decreased joint space, decreased range of motion, spinal/foraminal stenosis, joint inflammation, nerve impingement, and bone spurs. In severe cases, this pain can be constant.

Treatment of cervical DDD will depend on how acute the person's symptoms are, and how much pain they are in. Timeframes and treatment protocols can vary greatly from person to person, but in general rehab can be viewed in 3 phases.

### Phase 1: Pain control

Goals: Decrease pain, including improved sleep patterns
Manage inflammation
Improve passive range of motion (ROM) and tolerance to movement
Improve postural awareness, body mechanics and movement patterns

### Intervention:

- Rest
- Soft collar
- Modalities Ice, Heat, Ultrasound, Electrical Stimulation
- Massage
- Cervical decompression
- Gentle stretching
- Grade I mobilizations

Manual stretching, Manual traction, Shirt-pocket stretch

## Phase 2: Stretching, Strengthening, Increasing ROM

Goals: Continue pain management as necessary
Increase AROM and PROM
Gradual return to functional activities
Restore functional movement patterns
Minimal pain associated with daily activities
Increase performance for home exercise program (HEP)

### Intervention:

- Continue modalities as needed
- Postural awareness exercises
- Progress passive and active range of motion
- Cervical decompression
- Progress stretching program
- Isometric strengthening exercises
- Grades II IV

Home traction, Shirt-pocket stretch, C-spine AROM, Scapula pinches, Shoulder shrugs, Pec stretch, Chin tucks, Cervical isometrics / multifidus recruitment,

### **Phase 3:** Return to work and sports activities

Goals: Pain-free with all daily activities
Independent/self-management of HEP
Improve muscular strength and endurance
Gradual return to strenuous work
Gradual return to recreational sport activity

#### Intervention:

- Progress strengthening exercises
- Progress postural awareness exercises
- Increase strength of surrounding musculature
- Continue mobilizations as needed to help restore full ROM
- Work and/or sport specific exercises

Home traction, Shirt-pocket stretch, Pec stretch, Cervical isometrics and isotonics in all planes, Seated rows, TIYW's, Theraband - shoulder external rotation and extension, Work hardening exercises – specific to job requirements