

Cervical Fusion

Precautions: Anterior cervical fusion: avoid extension; Posterior cervical fusion: avoid flexion. For 4 weeks, no lifting >5#, then progress slowly. Do not lift above shoulder level. **No overhead lifting or activity.** Cervical collar use- usually soft collar: 1 Level for 2 weeks, 2 Levels for 2-4 weeks, and 3 Levels or greater for 6 weeks with hard collar, per physician recommendation.

Phase I (0 – 4 weeks post-op)

- Wound care: Observe for signs of infection
- Modalities: prn for pain and inflammation (ice, IFC)
- Exercises: Bed mobility, transfers, don/doffing collar, diaphragmatic breathing
 - Scapular retraction, Shrugs, Glut squeezes, SLR
 - Gait with appropriate assistive device (if necessary), increasing tolerance to 30 minutes or ½ mile daily
 - Reinforce sitting, standing, and ADL modification with neutral spine and proper body mechanics (posture education)
 - Stationary bike 15-30 minutes for cardiovascular activity

Phase II (4 – 8 weeks post-op)

- Wound care: Begin scar management techniques when incision is closed
- Modalities: prn for pain and inflammation (ice, IFC)
- Exercises:
 - UBE no resistance; Treadmill conditioning
 - AROM of UE- limit overhead activity
 - Wall push up (keep arms below shoulder height)
 - Gentle 2 finger cervical isometrics (<50%) while maintaining chin tuck
 - Thoracic mobilization exercises
 - Cat/camel, Upper thoracic extension, Upper thoracic rotation with use of hand collar)
 - Basic core stabilization with neutral spine- NO BRIDGING
 - General upper and lower body strengthening
 - Nerve glides prn (no reproduction of symptoms)
 - Lifting mechanics and education- LIMIT 10 lbs.

Phase III (8 weeks – 12 weeks post-op)

- Wound care: Continue as in phase II
- Modalities: prn for pain and inflammation (ice, IFC)

- ROM:
 - Gentle, pain-free cervical AROM
- Exercises:
 - UBE with resistance
 - Rhythmic stabilization of upper quarter
 - UE therabands
 - Shoulder shrugs and rolls with 2-5#
 - Sidelying head holds and Prone dorsal glide 5 – 15 seconds
 - Neuromuscular re-education of longus colli with pressure biofeedback with supine chin tuck
 - Raise from 20mmHg to 28-30 mmHg with 10 second hold, x10-20 reps
 - Modified plank from knees or standing lean vs. table
 - Gentle MFR, soft tissue mobilization, and OA work
 - Increase lifting as tolerated, up to 25#

Phase IV (12+ weeks post-op)

- Initiate stretching
- Resume jogging/running
- Return to work, review ergonomics, consider work conditioning program and/or FCE as needed
- Return to recreational activities as tolerated

Adapted From:

- 1) Center for Spinal Disorders Rehabilitation Department. Cervical Fusion Protocol. IMS Orthopedics, Issada Thongtrangan, MD.
- 2) Consulted with Brian Braaksma, MD. Rockford Orthopedic Spine Care.