

Posterior Cervical Laminectomy and Fusion REHABILITATION PROTOCOL

Phase I: Protection Phase/Immediate Motion (0 – 6 Weeks post-op)

0-6 Weeks post-op:

- ❑ No PT or the first 6 weeks
- ❑ Gradual return to ADL's at home
- ❑ Will see MD at 3 weeks post op

Phase II: Intermediate Phase (6 -12 Weeks post-op)

6-8 Weeks post-op:

- ❑ UBE no resistance
- ❑ Monitor for deltoid weakness/C5 palsy (**See Rehab notes**)
- ❑ Manage pain and swelling/modalities prn (Expect patients to experience more pain than anterior fusions or single level fusions)
- ❑ Monitor wounds for breakdown or infection. (**See Rehab notes**)
- ❑ Light resistance upper extremity exercises: 0-5 lbs.
 - Use massage face cradle for prone exercises to avoid excessive cervical extension
 - Scapulothoracic
 - Posture training
- ❑ Initiate balance activities
- ❑ Home program review/posture education
- ❑ Avoid cervical extension
- ❑ Light PROM or stretching of cervical spine with PT only. Do not push ROM
- ❑ Initiate neutral spine core stability training on treatment table: hook lying TA training, diaphragmatic breathing, lumbar multifidi training, etc.
- ❑ Soft tissue mobility on thoracic, cervical, upper traps
- ❑ Increase activity tolerance

8-12 Weeks post-op:

- ❑ Continue UBE for UE aerobic conditioning
- ❑ Manage pain and swelling, modalities prn
- ❑ May begin cervical isometrics in neutral
- ❑ May begin neural glides/mobilizations. Do not reproduce symptoms
- ❑ Progress UE strengthening, scapulothoracic stability, activity tolerance
- ❑ Continue neutral spine core stability training on mat. Okay to initiate sitting and standing neutral spine stability training
- ❑ Continue soft tissue mobilization



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- ❑ May begin grade II joint mobilizations on spinal segments. **No** joint mobilizations within 2 segments adjacent to fusion
- ❑ Progress balance/proprioceptive training

Phase III: Advanced Strengthening Phase (12 - 16 Weeks post-op)

12-15 Weeks post-op:

- ❑ Continue UBE, may progress to elliptical, recumbent bike, treadmill walking
- ❑ Progress UE strengthening, scapulothoracic stability, activity tolerance
- ❑ Progress to transverse and frontal plane core training.
- ❑ Continue soft tissue mobility, modalities, as needed
- ❑ Continue joint mobilizations on spinal segments. **No** joint mobilizations within 2 segments adjacent to fusion. Do not exceed grade II joint mobilizations.
- ❑ Continue to progress balance and proprioceptive training

16 Weeks post-op:

- ❑ Continue with all ROM, flexibility, stretching, and strengthening
- ❑ Core stability training in all planes/multi planar
- ❑ Initiate plyometric program after consultation with physician

Phase IV: Return to Activity Phase (16 – 32 weeks post-op)

- ❑ Initiate interval sport program if applicable after consultation with physician and completion of 2 week plyometric program
- ❑ Continue with established strength, plyometric, and flexibility programs

24 Weeks post-op:

- ❑ Continue Strengthening, flexibility, stretching, and plyometrics
- ❑ Gradual return to recreation/sport
- ❑ Criteria for return to play:
 - Satisfactory ROM, Strength, and Clinical Exam
 - Satisfactory completion of interval sport program
 - Physician approval

Rehab Notes:

Patients may experience post-op deltoid weakness due to C5 palsy from the decompression. 95% of C5 palsy cases will resolve within 6 months of surgery and 7-10% of all posterior cervical laminectomy/fusion surgeries will get a C5 palsy. The C5 palsy may not show up until up to 6 weeks out from the decompression but usually shows up within the first three weeks. Contact the physician if you think weakness is new and was not noted on the PT script.

Posterior cervical wounds take longer to heal time and may break down due to fact that the trapezius is dissected down the midline. Watch for splaying of the trapezius causing a webbing of the neck. Contact physician immediately if concerned about wound or trapezial splaying or wound breakdown.



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