

Patient Name: _____
Diagnosis: _____
Notes: _____

Cervical Disc Replacement Physical Therapy Prescription

The intent of this protocol is to provide guidelines for rehab. It's not intended as a substitute for clinical decision making.

If any of the following occur, contact Dr. Poulter and hold off on physical therapy:

- Any signs of infection
- Worsening of radicular symptoms, including progressive weakness
- Unexpectedly high self-reports of pain in comparison to pre-surgical state

Phase I (0 to 2 Weeks): Protective Phase

Precautions

- Avoid bending, twisting, lifting, pushing and pulling **25 pounds or more for six weeks.**
- No specific cervical exercises in first two weeks, cardio and scapular retractions only.
- Patient may or may not be in a brace for the first two weeks.

Goals

- Diminish pain/inflammation and minimize upper extremity radiating symptoms (ice, modalities as needed).
- Learn correct posture, body mechanics, transfers.
- Focus on cardio exercise program, increasing tolerance to 30 minutes, two times a day.

Education

- **Postural Education:** Sitting posture with lumbar roll at all times; frequent change in positions, avoid prolonged flexion (books, phones, iPads, etc.), sleeping positions
- **Body Mechanics:** Light lifting, transfers (include log rolling), positioning, etc.
- **Driving:** When off narcotic pain medicine

Exercises

- **Cardio:** Walking or stationary bike two times a day, 10 minutes each session to start
- **Scapular Retractions:** Emphasis on neuromuscular control (eliminate shrug), 10" isometrics
- **Light Stretching:** Pecs only (eg.: supine over towel)

Phase II (2 to 6 Weeks): Strengthening Phase

Therapy

- Starting at week two, two to three times per week, four or more times a week

Precautions

- Keep spine in neutral and good posture for strengthening with a focus on proper neuromuscular control.
- Lifting, pushing and pulling less than 25 pounds until six weeks.
- Gentle active range of motion only (no passive stretching nor aggressive range of motion).
- No extension active range of motion until four weeks.

Goals

- Patient to have proper neuromuscular control and posture with stabilization and strength exercises
- Initiate light strengthening and progress to independent with long term home exercise program
- Release soft tissue restrictions/muscle spasm/scar
- Body mechanics review
- Increase aerobic endurance to 30 minutes

Flexibility

- **Cervical Active Range of Motion:** Emphasis on retractions, gentle range of motion only
- **Stretching:** Pecs, thoracic extensions
- **Neural Mobilization:** Performed as needed, gentle with caution not to flare up nerve roots

Manual Therapy

- Sound assisted soft tissue mobilization for restriction and spasm

Strength

Only initiate these once patient can complete Phase I exercises. Then begin with light resistance and slowly progress. Emphasize good posture and correct muscle firing of scapula stabilizers during each exercise.

*(This is **not** a complete list.)*

- **Postural/Scapula Strengthening**
 - Scapular retractions first (emphasis on neuromuscular control-eliminate shrug)
 - Prone scapula strengthening
 - Theraband rows, extensions, external rotation, horizontal abductions, etc.
 - Transverse abdominis isometrics first, then progression
 - Machine rows, lateral pull down (keep bar in front of the head), free motion machine, etc.
- **Cervical Postural Strengthening**
 - **Deep Cervical Flexors:** Emphasis on correct neuromuscular control, 10" isometrics to start
 - Prone on elbows, quadruped, modified plank position with 10" retraction isometrics
 - **Swiss Ball:** Seated, quadruped stabilization exercises
 - Seated retractions against Theraband
 - Cervical isometrics (if needed)

Cardio

- Should be continued to be done daily working up to at least 30 minutes per day (emphasis on walking or stationary bike to start).
- Time frames may vary per patient, consult with Dr. Poulter if you have questions (eg.: an avid cyclist with proper bike fit might start sooner).
- Emphasize correct form and equipment setup (eg.: elliptical, bike, walking terrain, etc.).
- When initiating running and sports listed on the following page, slowly increase in the six to eight week time frame.

	No Earlier Than:
Walking Progression	At least 30 minutes a day
Stationary Bike (Upright/Recumbent)	Gradual increase in resistance at four weeks
Outdoor Biking	Four weeks
Hiking	Four weeks
Pilates (Neutral Spine)	Four weeks
Elliptical	Six weeks
Skiing	Six weeks

	No Earlier Than:
Yoga	Six weeks
Swimming	Six to eight week progression
Running	Six to eight week progression
Soccer/Basketball	Six to eight week progression
Golf	Six to eight week progression

Aquatic Physical Therapy *(more than three weeks, if available, once incision has healed)*

- Transverse abdominis bracing during all exercises and good head position
- Walking all directions, balance, lower extremity and upper extremity strengthening

**Phase III (6+ Weeks): Return to Work/Work Conditioning/
Return to Sport (if applicable)**

- No lifting restrictions after six weeks.
- Continue to progress strengthening exercises from Phase II.
- Continue any manual therapy, stretching, etc. from Phase II as appropriate.
- Functional/sport/job drills may begin now with supervision. See time frames above for sport time frames.
- Possible referral to work reconditioning program.