

## Cervical Fusion

### General Considerations:

- Decrease Swelling
- Prevent Stiffness
- Increase Activity Tolerance
- Improve Stabilization

### Precautions

- With Anterior Cervical Fusion – avoid extension
- With Posterior Cervical Fusion – avoid flexion
- A.R.C.M. is patient dependent and will be based on Physician preference and the level and number of fusions.

		ATTAINMENTS	GOALS
I. Pre- P.T.  Wound Healing and Protection  0-3 weeks	<ul style="list-style-type: none"> <li>• Increase tissue tolerance to activity</li> <li>• Decrease inflammation</li> <li>• Increase cervical isometric tolerance</li> <li>• Encourage wound healing</li> </ul>	<ul style="list-style-type: none"> <li>• Home Exercise Program           <ul style="list-style-type: none"> <li>▪ Per hospital discharge</li> <li>▪ Cardiovascular Exercises               <ul style="list-style-type: none"> <li>▪ Bike</li> <li>▪ Walking</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Independent HEP</li> <li>• Activity Tolerance           <ul style="list-style-type: none"> <li>◦ Light resistance training/mat exercise = 15 minutes</li> <li>◦ Cardiovascular = 20 minutes</li> <li>◦ Weaned to soft collar per physician orders</li> <li>◦ Functional ADL for hygiene</li> </ul> </li> </ul>
II. Initiation of P.T.  Basic Stabilization, Flexibility, Body Mechanics, and Activity Tolerance  3-6 weeks 2-3 sessions/week	<ul style="list-style-type: none"> <li>• Teach scar mobilization</li> <li>• Stabilization with U/E exercises</li> <li>• Posture</li> <li>• Body Mechanics           <ul style="list-style-type: none"> <li>◦ ADL discussion</li> <li>◦ Advance Isometrics</li> <li>◦ Restricted to 5 lbs. max with free weights</li> <li>◦ No overhead activity</li> <li>◦ Positional tolerance</li> <li>◦ Return to work investigation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Cervical Isometrics</li> <li>• Shoulder Shrugs</li> <li>• Shoulder Rolls</li> <li>• Scapular Mobilization and Stabilization</li> <li>• Thoracic Mobilization</li> <li>• Neuromuscular Re-education</li> <li>• Abdominal Exercises (watch position of the c-spine)</li> <li>• Basic Core Stabilization (Lumbar)*</li> <li>• Incline push up</li> </ul>	<ul style="list-style-type: none"> <li>• MMT 4/5 U/E except overhead</li> <li>• Prone dorsal cervical glide 15 sec.</li> <li>• Sidelying head hold 15 sec.</li> <li>• Modified Plank 10 sec.</li> <li>• Demonstrate proper scapulo-humeral rhythm</li> <li>• Sitting/Standing posture 30+ min.</li> <li>• Cardiovascular activity = 30 min.</li> <li>• Light resistance training/mat exercise = 20 min</li> </ul>
III. Advanced P.T.  Strength, Balance activities, and Cardiovascular training  6 – 10 weeks 2-3 sessions/week	<ul style="list-style-type: none"> <li>• Body mechanics, posture emphasis with exercises, postural drills</li> <li>• Increased upper extremity strength and stabilization (primary scapular)</li> <li>• Spinal stabilization (all levels)</li> <li>• ADL review for problem areas</li> <li>• Soft tissue mobilization</li> <li>• Return to work assessment</li> <li>• Cervical Mobility</li> </ul>	<ul style="list-style-type: none"> <li>• Shoulder Shrugs and Rolls (2-5 lbs.)</li> <li>• Chest Press</li> <li>• Seated Rows (Trunk Stabilized)</li> <li>• Rhythmic Stabilization of upper quarter</li> <li>• Gentle MFR and O/A work</li> <li>• UBE</li> <li>• Gentle AROM to c-spine (see precautions)</li> <li>• Consider FCE at end of phase (physician dependent)</li> </ul>	<ul style="list-style-type: none"> <li>• MMT 5/5 U/E</li> <li>• Prone dorsal cervical glide 30 sec.</li> <li>• Sidelying head hold 30 sec.</li> <li>• Modified Plank 30 sec.</li> <li>• Continued cardiovascular activity = min 30 min.</li> <li>• Continued resistance training/mat exercise = minimum of 30 min.</li> </ul>
IV. Functional Rehabilitation  Recreational Activities, Return to Work, Advanced Stabilization, Independent Program  10 weeks +	<ul style="list-style-type: none"> <li>• Progress to independent program</li> <li>• Restrictions limited to safety issues</li> <li>• Encourage cardiovascular, strength, and flexibility training</li> <li>• Progress to pre-morbid activities</li> <li>• Review postural drills</li> </ul>	<ul style="list-style-type: none"> <li>• Independent program with integration of posture, strength, flexibility, and lifting considerations</li> <li>• Review of ergonomics</li> <li>• FCE / Return to Work Program if appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• MMT 5/5 U/E</li> <li>• Prone dorsal cervical glide 1 min.</li> <li>• Sidelying head hold 1 min.</li> <li>• Modified Plank 1 min.</li> <li>• Independent with all Exercises and home/gym program</li> <li>• Resumption of recreational activity</li> <li>• Demonstrate proper body mechanics and posture</li> </ul>