

# PROCEDURE SPECIFIC WRIST CPM THERAPY

## WRIST CONTRACTURE, STIFFNESS<sup>3,4,5,6,8,9,10,19</sup>

### Standard Static Progressive Stretch Setup

- Move Maestra Wrist CPM through available range of motion stopping at the end range.
- Initially set force reversal at mid-range. The force reversal setting will be increased or decreased depending on patient tolerance.
- Set the pause mode for 5 minutes.

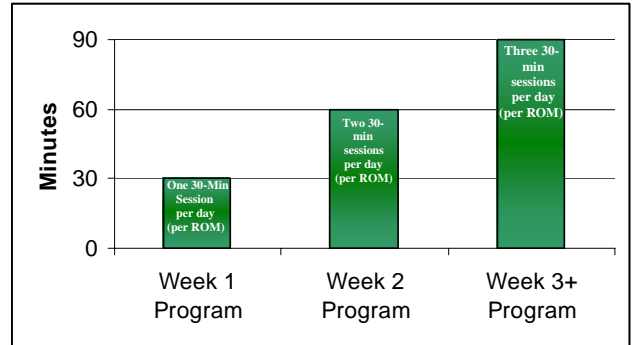
### Wearing Schedule

- Throughout each treatment session, patients as needed adjust CPM to pain-free position at the end range. Each position is held in pause mode for 5 minutes to allow for tissue relaxation and elongation. After 5 minutes the CPM is advanced to the new end range position of stretch.<sup>8</sup>
- Initially the device should be used 30-60 minutes 1-2 times a day week one.
- Week two the 30-60 minute session should be increased to 2-3 times a day as tolerated.
- Following week two the 30-60 minute sessions can be increased to 3 or more sessions daily or as needed.

### PROM Goals

- The patient increases ROM as tolerated, pain free to meet ROM goals.<sup>8</sup>
- This use guideline should be repeated for each plane of desired ROM.<sup>8</sup>
- Stable platform CPM may offer improved compliance over non-stable splints and CPMs for static progressive stretch.

Note: Specific PROM and usage parameters are determined by the physician.



Maestra Wrist CPM

#### REFERENCES:

1. Bonutti PM, Windau JE, Ables BA, Miller BG: Static progressive stretch to reestablish elbow range of motion, *Clin Orthop*; 6(303): 128-34, 1994.
2. Chigey LK, Dell PC, Muniz RE: Continuous Passive Motion of the Wrist Following Arthroscopy and Ganglionectomy as means of influencing the Recovery of Optimal Wrist Motion. Study presented at ASHT Meeting Jan-March, 1990.
3. Daane, M: (2002) [Evaluation of CPM insurance coverage]. Unpublished raw data.
4. Flowers KR, LaStayo P: Effect of total end range on improving passive range of motion, *J Hand Ther*; 7(3): 150-7, 1994.
5. Gelinas JJ, Faber KJ, Patterson SD, King GJ: The effectiveness of turnbuckle splinting for elbow contractures, *J Bone Joint Surg BR*; 82(1): 174-8, 2000.
6. Haneau, J PT, OTR: What Makes Treatment for Reflex Sympathetic Dystrophy Successful? *J Hand Ther*; 9: 367-370, Oct - Dec, 1996.
7. Herbert TJ: *The fractured scaphoid*, St Louis, 1990, Quarterly Medical Publishing.
8. Herbert TJ, Fischer WE, Leicester AW: The Herbert bone screw: a ten year perspective, *J Hand Surg* 17B:415, 1992.
9. Herbert TJ, Fischer WE: Management of the fractured scaphoid using a new bone screw, *J Bone Joint Surg* 66:114, 1984.
10. Kaczander B: The podiatric application of continuous passive motion, a preliminary report, *J Am Pod Med Assoc*; 81: 12, 1991.
11. LaStayo PC, Cass R: Continuous passive motion for the upper extremity: why, when, and how. In Hunter JM, et al, editors: *Rehabilitation of the Hand*, ed 5 St Louis, 2002, Mosby.
12. Mooney V, Stills M: Continuous passive motion with joint fractures and infections, *Orthop Clin North Am* 18:1, 1987.
13. O'Driscoll SW, Giori NJ: Continuous passive motion (CPM): Theory and principles of clinical application, *J Rehab Res Dev*; 37: 179, 2000.
14. Osterman AL, Bora FW, Skirven T: The use of continuous passive motion in hand rehabilitation. Proceedings of the 42<sup>nd</sup> annual meeting of the Orthopaedic Research Society, vol 3, February 1978.
15. Salter RB: The prevention of arthritis through the preservation of cartilage, Royal College Lecture, *J Can Assoc Radiol* 32:5, 1981.
16. Salter RB: The effect of motion on regeneration of cartilage. Proceedings of the International Workshop on Rehabilitation of Articular Joints by Biological Resurfacing, Dallas, November 15-17, 1979.
17. Salter RB: The healing of bone and cartilage in intraarticular fractures with continuous passive motion. Transactions of the twenty-fourth annual meeting of the Orthopaedic Research Society, vol 3, February 1978.
18. Salter RB, Bell RS: The effect of continuous passive motion in the healing of partial thickness lacerations of the patellar tendon of the rabbit, *Ann Royal Coll Phys Surg Can* 14:209, 1981.
19. Salter RB, O'Driscoll SW: The effects of continuous passive motion on repair of full thickness defects in a joint surface with autogenous osteoperiosteal grafts. *Ann Royal Coll Phys Surg Can* 16:360, 1983 (abstract).
20. Salter RB, Minster RR: The effects of continuous passive motion on a semitendinosus tenodesis in the rabbit knee, *Proc Orthop Res Soc* 7:225, 1982.
21. Salter RB, Bell RS, Keely F: The protective effect of continuous passive motion on living articular cartilage in acute septic arthritis, an experimental investigation in the rabbit, *Clin Orthop Rel Res* 159:223, 1981.
22. Salter RB, Harris DJ, Bogoch F: Further studies in continuous passive motion. *Orthop Trans* 212, 1978 (abstract).
23. Salter RB, Wong DA, Keeley FW: Collagen typing of early repair tissue in healing articular cartilage: an experimental study in the rabbit, *Orthop Trans* 4:397, 1980.
24. Schatzker J, Tile M: *The rational of operative fracture care*, New York, 1987, Springer-Verlag.