Elbow Stiffness - Rehabilitation & Turnbuckle Brace

Derek Plausinis, MASc, MD, FRCSC

Principles

- Frequent range of motion
 - o Exercise for a minimum of 20 minutes every 2 hours while awake
 - o The more exercise the better
- Avoid lasting pain
 - It's okay to feel some pulling and discomfort with the exercise. After exercises, you should have a 'having-exercised type of feeling', and not lasting pain.

Motion Exercises

- Flexion (bend) & extension (straight):
 - Support upper arm (humerus) on a high countertop and keep it flat. Use your own muscles to flex/extend the elbow, and then use the other hand to give a little extra push.
 - Push and hold (for about 10 to 20 seconds), release, then push and hold again in the same direction. Change directions (flexion/extension) and repeat.
 - If you have a sore shoulder, you can do the same exercises standing and stabilizing the upper arm flat against a wall.
- Forearm rotation. Supination (palm up) & Pronation (palm down)
 - Keep your elbow bent 90 degrees and held at your side.
 - Use your own muscles to turn your hand palm-up (supinate), and grasp the wrist on the stiff elbow side, and use your unaffected hand to twist a little further. Push and hold, release, push and hold again, and then change directions to palm down (pronation).

Turnbuckle brace

- Nighttime:
 - Work on direction most needed (usually extension/straightness)
 - o Apply turnbuckle and increase pressure to feel tension and stretching
 - Be able to sleep 6 hours without waking up with elbow pain. If you wake up sooner with elbow pain, the brace was set a little too tight and back off on the pressure.
 - Typically use the brace at night for at least 3 months
- Daytime:
 - May be brace free for:
 - Exercises (exercises are the number 1 priority)
 - 1 hour off at meal times
 - Use brace in between exercises
 - Most of the time, set to direction opposite to night-time use
 - Depending on how the motion is coming along, you can alternate between flexion (bend) and extension (straight). Spend more time in the daytime with which ever motion is needed most.
 - Goal is to achieve minimum motion from 30° to 130° (a perfectly straight elbow is at 'zero degrees').