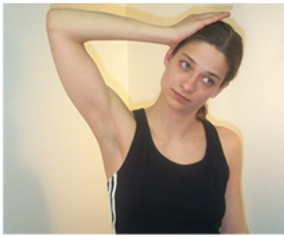


## CERVICAL RANGE OF MOTION TEST

### EXERCISE OPTIONS FOR STRENGTHENING THE PARASPINAL CERVICAL MUSCLES



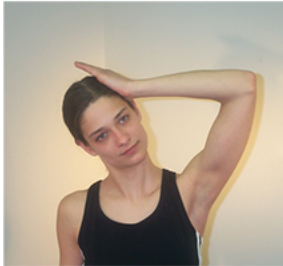
**1a)** Apply pressure through the range of motion



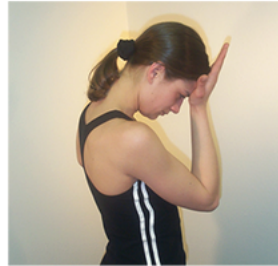
**1b)** First, move the head in the direction of the hand (concentric contraction)



**1c)** Continue this in all 4 directions of motion



**1d)** Second, keep pressure against the hand but allow the hand to over pressure the head/neck



**1e)** This produces an eccentric contraction



**1f)** Therefore, 1a-f will be performed 2x. (concentric & eccentric contractions)

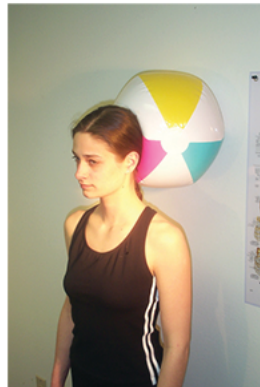
**Hold Time: Manual resistance (#1)** move slowly through the ROM using 25-50% of max. contraction (within pain limits).

Repeat 1a-f using 2 methods: a concentric contraction

("...let the head win") and eccentric ("...let the hand win"). Repetitions: 3 times in each direction; Sets: 2-3 (within tolerance)



**2a)** Apply isometric pressure against the beach ball within tolerance.



**2b)** Repeat this in all 4 directions



**2c)** Do at various points in the ROM (not only neutral as shown)



**2d)** Try to simulate a movement (isotonic) by moving away & towards the ball

**Beach ball exercises (#2)**, Repetitions: 1-3 reps; **Sets:** 1-3 sets; **Hold Time:** 3-10 seconds (or point of fatigue).

The photos show only the neutral position. An isometric contraction from the middle & end points of each ROM (partial & full flex / ext. and full lateral flexion) is also recommended.

**Sessions/day (circle):** 1 2 3 4 Unlimited;

**Objective:** To stretch and strengthen the cervical spinal musculature

**Instructions:** Perform each repetition very slowly, smoothly, and symmetrically.

Stay within "safe-pain" limits.

