



Concussion Vision Therapy and Oculomotor Rehab

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Before you begin:

- Please speak to your physician prior to attempting this rehab protocol.
- Exercises should be completed in front of a blank wall first.

1. Smooth Pursuits (✓ No head movement)

Horizontal

- I. Hold your thumb out straight at eye level. Slowly move it back and forth from right to left in the horizontal plane, while following with your eyes and keeping your head still.

- II. **Complete:** 3 sets of 10 repetitions

Vertical

- I. Hold your thumb out straight at eye level in the midline. Slowly move it up and down in the vertical plane.

- II. **Complete:** 3 sets of 10 repetitions



2. Saccades (✓ No head movement)

Horizontal

- I. Hold your arms out straight and approximately 1 meter apart at eye level with your thumbs up. With your head still, quickly switch from looking at one thumb to your other thumb.

- II. **Complete:** 3 sets of 10 repetitions

Vertical

- I. Hold your arms out straight with one arm on top of the other in your midline with your thumbs up. With your head still, quickly switch from looking at one thumb to your other thumb.

- II. **Complete:** 3 sets of 10 repetitions



Scheiman M, Mitchell GL, Cotter S, Kulp MT, Cooper J, Rouse M, et al. A randomized clinical trial of vision therapy/orthoptics versus pencil pushups for the treatment of convergence insufficiency in young adults. *Optom Vis Sci.* 2005; 82(7):583-595.

A Randomized Clinical Trial of Treatments for Convergence Insufficiency in Children Mitchell Scheiman, OD; G. Lynn Mitchell, MAS; Susan Cotter, OD; Jeffrey Cooper, OD, MS; Marjean Kulp, OD, MS; Michael Rouse, OD, MS; Eric Borsting, OD, MS; Richard London, MS, OD; Janice Wensveen, OD, PhD; for the Convergence Insufficiency Treatment Trial (CITT) Study Group



3. Near/Far Fixation Exercises (✓ No head movement)

- I. Hold your thumb out straight at eye level in your midline approximately 30 centimeters away from your face.
- II. Find an object approximately 2 to 4 meters away from you.
- III. Switch your focus from your thumb to the object away from you.
- IV. **Complete:** 3 sets of 10 repetitions



4. Pencil Pushup's for Convergence Insufficiency (✓ No head movement)

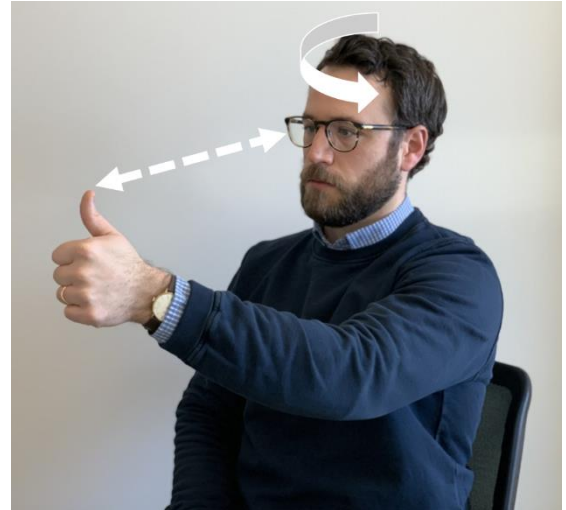
- I. Wear your glasses or contact if you have been prescribed them
- II. Hold a pen/pencil in one arm at eye level in the midline
- III. Focus on the shape of the pen or letters on the pen
- IV. Slowly bring the pen towards your nose maintaining focus on the shape or letters.
- V. Your eyes will turn inward or converge as the pen/pencil approach the bridge of your nose.
- VI. The goal is to maintain a single vision of the pen. It is okay if the pen/pencil becomes blurry.
- VII. When the pen becomes double, hold the pen/pencil in place and attempt to convert the double visual into a single by either focusing or relaxing your eyes.
- VIII. Then slowly move the pencil away until it is at arm's length.
- IX. **Complete:** 3 sets of 10 repetitions





5. Gaze Fixation/Stabilization

- I. Fixate on a stable object approximately 2 to 6 feet in front of you (you may hold your arm out and fixate on your thumb)
- II. Slowly rotate your head from left to right while leaving your eyes fixed on the object.
- III. Complete 10 full repetitions x 3 sets.
- IV. Next, rotate your head up and down while leaving your eyes fixed on the object.
- V. **Complete:** 3 sets of 10 repetitions
- V. *To make this more challenging, change your distance from the object, increase the speed of your head movement, perform the action standing or walking.*



6. Peripheral Awareness Exercises (✓ No head movement)

- I. Stare at a blank wall or an object in the distance.
- II. While staring straight ahead, throw a soft ball or soft object straight up and down and catch it in the same hand.
- III. Repeat on the other side.
- IV. **Complete:** 3 sets of 10 repetitions
- V. *To make this more challenging, increase the height of the throw, close one eye, sit in front of a busy space or wall, and/or walk in an uncluttered safe environment.*



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