

Case study: Carly

Patient is a 54 year old female diagnosed with cranial nerve VI palsy following a brain tumor resection. She is the primary caregiver of 2 children, ages 12 and 10 years old.

Complaints

- Diplopia at intermediate and distant ranges
- Difficulty judging distances while driving or putting away items in cabinets
- Double vision worsens in open spaces and on stairs/escalators

Vision screen findings

- Decreased range of motion temporally in right eye past midline
- Esophoria of 6 at near and esophoria off the card at far
- Visual fields appear full during confrontation testing
- Right eye suppression on Worth 4 dot test at 10 feet

Cognitive

- Alert and oriented x3, good historian. Follows multistep commands

Physical assessment

- Decreased dynamic standing balance which worsens in crowded or visually stimulating environments

Social

- The patient enjoys reading mystery novels, shopping, and was working in the United Nations as a secretary.
- The patient now lives with her children in an apartment with 3 steps to enter.

1. Why does she complain of double vision at far but not at near?
2. What is the first exercise you would try with this patient?
3. Describe treatment plan in detail, include referrals and how should we measure progress?

Case Study: Suzanne

Patient is a 20 year old female who sustained a concussion after she was the driver in MVA 2 months ago. Patient tried to return to school but having symptom exacerbation during classwork. She presents to therapy with the following complaints:

Complaints:

- Fatigue, eyestrain and headache with reading
- Difficulty copying notes from powerpoint slides in class
- Sensitivity to light and screens
- Difficulty attending to information from teacher while she walks around the room

Vision screen findings

- Near acuity is 20/50 in both eyes at near. She does not wear corrective lenses
- Pursuits are jumpy but ROM is full
- Overshooting/Undershooting noted during saccade testing
- Horizontal DEM (subtest C) is 57.00 seconds
- Accommodation is 8 inches in both eyes (5 D)
- She requires increased time to appreciate depth
- Eye alignment testing is 10 exophoria at near
- Convergence break point is 10 inches (25 cm)
- Your patient noted to pull away from target during convergence testing

UE Physical Assessment

- Patient noted to slump in chair throughout screening
- Patient holding head during all reading tasks
- Shoulders elevated with palpable tension in neck and upper back

Cognitive

- Patient is alert and oriented x3, able to follow multistep commands and memory is intact
- Patient is noted with increased distractibility and poor attention

Social

- Patient lives at home with mother. Mother works full time
- Patient is commuting to campus daily, via car. She is driving
- Patient noted with increased anxiety and reports increased depression due to symptoms

1. Why might this patient be having difficulty reading/studying in school?
2. Why might she be having difficulty copying notes?
3. Describe your treatment plan, including providing education, resources, and referrals.
4. What are 3 exercises you might try with her?

Case Study: Zach

Patient is a 78 year old male who underwent pacemaker placement and when he awoke from surgery he had a new onset of blurred vision. CT scan revealed new right MCA infarct. He was seen by neuro-ophthalmology who performed Humphrey Test and he presents to therapy with left homonymous hemianopsia.

Complaints

- Bumping into items on the left
- Difficulty making sense of what he is reading
- Blurred vision

Vision Screen findings:

- Smaller saccades when looking left; increased refixations
- During pursuit testing, patient losing target when looking left
- Visual field confrontation testing reveals dense left homonymous hemianopsia

Physical Assessment

- Using RW for balance
- UB and LB strength WFL

Cognitive

- Minimal short term memory deficits and decreased attention

Functional observations

- Patient hits left side of door frame with RW when entering and leaving your office
- Patient positions objects on his right side during testing (i.e. holding DEM testing booklet in right space).

1. How would you rule out spatial neglect and visual field loss?
2. What are some compensatory treatment activities you would have this patient perform or engage in?
3. What are remedial treatment activities you would have this patient perform?