NORA Fellowship Level 2 Case Report Format Requirements

- In order for candidates to complete NORA Fellowship Level 2 they are required to write two written patient case reports that significantly involve Neuro-Optometric Rehabilitation. "Neuro-Optometric Rehabilitation" is defined by NORA as: "Treatment regimens encompass medically necessary non-compensatory lenses and prisms with and without occlusion…". https://noravisionrehab.org/patients-caregivers/what-is-neuro-optometric-rehabilitation

- It is expected that the candidate receives feedback and completed one case report BEFORE submitting the second case report (in order to minimize the same mistakes)

- The two cases are expected to be different in nature that will demonstrate different aspects of the candidate's diagnostic and clinical skills. For example, the candidates should avoid having two concussion cases that received very similar treatment.

- To ensure a smooth and efficient review process, the case report must be written in paragraph form (not point form), typed, Times New Roman 11-point font, 1.5-spaced, with Narrow Margins (0.5 inches top, bottom, left, right), with no page-break between sections and should be submitted as a Word document or equivalent.

- Do not include your name in the case report and do not include a cover page.

- Save the file and name it as FNORA Level 2 Case Report #, (Topic-Patient's Initials) followed by your initials and date of submission:

    - For example: **FNORA Level 2 Case Report One (TBI-JY) AP 3 23 2022**

- If the candidate's profession is not Optometry, the case report must involve the findings and treatment from a Neuro-Optometrist in order for the case to be considered a Neuro-Optometric case report. Non-optometrist candidate should also include in the case report case history questions and/or screening tests performed to rule out the possible vision problems.

- Email the completed case report to the NORA Fellowship Committee at FNORAofficial@gmail.com

Case report

Abstract **(confine to no more than 200-350 words)**

It should consist of these sections: BACKGROUND, CASE REPORT, CONCLUSIONS followed by 3 to 8 KEYWORDS. The abstract should briefly summarize the patient's background, findings, treatment and outcome.

ABSTRACT (Sample)

Background: Traumatic brain injury (TBI) is common and one in every five cases of TBI was caused by motor vehicle accident. Patients with TBI were found to have high prevalence of vision symptoms and dysfunctions. We are reporting a patient who sustained a TBI from a motor vehicle accident and received treatment by a developmental optometrist with Neuro-optometric rehabilitation and a physical therapist with Integrative Manual Therapy™.

Case Report: A 28 year old Caucasian male was examined for a Neuro-optometric evaluation. His vision problems started after he sustained a TBI due to a car accident 11 years ago. His main symptoms included reading difficulties,

ocular pain, headaches, and depth perception problems. The evaluation revealed binocular dysfunction, accommodative dysfunction, oculomotor dysfunction, reduced peripheral visual awareness, and visualization anomalies. Treatment included 20 sessions of weekly office-based optometric vision therapy, home-based syntonics, primitive reflex integration, and single vision lenses with base-in prism. He also received approximately 13 sessions of Integrative Manual Therapy™ over a 11 month period which began 5 months prior. At the 1-month post vision therapy progress evaluation, he reported significant improvement in symptoms. Shortly after, his family relocated back to his home state. Maintenance home-based visual activities were prescribed and he was recommended to continue his care with a developmental optometrist in his area. A phone follow up 15 months later indicated that his symptoms had remained stable.

Conclusion: Patients with TBI secondary to car accidents can suffer detrimental vision symptoms. This case illustrates that significant improvement of symptoms and quality of life of a TBI patient is possible as long as 11 years post injury.

KEYWORDS: Traumatic Brain Injury, motor vehicle accident, Neuro-Optometric Rehabilitation, Optometric Vision Therapy, Integrative Manual Therapy™, Syntonics, Primitive Reflex, Base-in Prism.

Introduction

In order to retain the confidentiality of the patient, do not include the name, date of birth, address, phone number of the patient.

- **History**

  A) Patient's initials; age, gender, occupation, educational background/work status, marital status, family composition, patient's level of dependence/independence

  B) Referring professional(s) and their areas of specialization

  C) Referring professional's reasons for the referral

  D) Patient's reasons for the consultation

  E) Date of onset and details of presenting symptoms and signs of the neurological dysfunction: areas and degrees of disablement, levels of pain and/or discomfort; effects on normal daily living

  F) Condition/s (inherited or acquired, acute or chronic, related to disease, trauma or injury, sensory and/or motor loss (e.g. TBI, Stroke, brain surgery etc.)

  G) History of medical, and surgical treatment and list of medications

  H) Previous rehabilitation services received

  I) If available, a brief summary of the results from other disciplines.

  J) Patient's overall functional abilities (speech, mobility, alertness, etc.)

K) Overview of patient's and patient's family goals

L) Patient's and family's expectations from this consultation within the broader perspective of the global goals

II General Background information on the existing conditions (for example, TBI, Stroke). Include references.

III Based on the patient's history, what specific areas are you interested in evaluating? Why?

IV Patient assessment/s

Candidates should consider the following tests. Your selection of tests will be reviewed. In addition, testing that was omitted should be explained if there are specific reasons not to perform or if it should have been performed. Non-optometric candidates should attempt to gather these findings from the optometric evaluation prior to the referral to you or after your referral to the optometrist, as well as any information you gathered during the vision screening that triggered the referral.

A. Vision Examination (If the listed test was not performed, please indicate reason why and if it would have been beneficial to perform)

a. Visual Acuities (Distance and near), Objective and subjective refraction and best corrected visual acuity.

b. Current glasses/contact lens prescription.

c. Eye dominance, Hand dominance, Stereopsis, color vision testing.

d. Visual field testing (Confrontation and/or other methods)

e. Oculomotor and Binocular evaluation:

i. Extraocular muscles

ii. Eye movement (Pursuits, Saccades, etc.)

iii. Amplitudes of accommodation

iv. Near point of convergence

v. Convergence and divergence ranges

vi. Concomitancy (if strabismus is present)

vii. Fusion testing (if strabismus is present)

f. Pupils testing, **Intraocular Pressure** (measurements and method), **Slit Lamp biomicroscopy** (describe findings of eyelid, lashes, lacrimal, conjunctiva, cornea, anterior chamber, angles, iris, lens), tonometry (eye pressure), **Ophthalmoscopy** (method used and describe ocular media, optic nerve, Cup-to-Disc ratios, retinal vessels, and macula). **Dilated Fundus Examination** results (who/when to be performed **if not done**).

B. Visual Midline Assessment. Should include at least one test for Visual Midline Shift Syndrome.

C. Balance/Posture Screening. Should describe overall posture and include at least one observational test or standardized test for balance and one test for gait.

D. Other tests that you have performed or may be appropriate for this particular patient

V. Diagnosis/ Impression

List the vision diagnoses and the overall clinical impression of the severity of the vision issues.

VI. Case conference and discussions

Describe how you coordinated care or communicated to other professionals who also work with this patient

VII. Treatment/Management Plan (including the planned integration with other disciplines)

Are lenses (such as low plus or other therapeutic lenses) prescribed? If not, would they likely be helpful? (and why)

Are prisms (such as base-in prisms) or yoked prisms prescribed? If not, would they likely be helpful? (and why)

Are tints prescribed? If not, would they likely be helpful? (and why)

Are occlusions (such as Binasal Occlusion) prescribed? If not, would they likely be helpful? (and why)

Is Optometric Vision Therapy prescribed? If not, would it likely be helpful? (and why)

VIII. Prognosis for improvement

IX. Follow-up or re-evaluations

X. Discussion

XI. Conclusion

XII. Self Critique: what would you have done differently with this case?

XIII. References

The references section should follow the reference format of a peer-reviewed optometric journal such as **Vision Development and Rehabilitation**

https://www.editorialmanager.com/vdr/account/Authors_Final.pdf

or **Optometry and Vision Performance**

https://www.ovpjournal.org/author-guidelines.html

Sample Case Reports:

Vision Dysfunctions after Motor Vehicle Accidents: a Case Report

https://cdn.ymaws.com/www.covd.org/resource/resmgr/ovd41-3/ovd41-3_case_report.pdf

Visual Field Defects secondary to a Cerebral Vascular Accident

https://www.ovpjournal.org/uploads/2/3/8/9/23898265/ovp3-6_article_larson_web.pdf

From Braille to Quilting: a Neuro-Optometric Case Report

https://cdn.ymaws.com/www.covd.org/resource/resmgr/ovd41-2/article_neurooptcasereport.pdf