GRAND ROUNDS: LV EXAM ESSENTIALS FOR EFFICIENT COMPREHENSIVE CASE REPORTS

# 54870-LV COPE APPROVAL

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1977: OD degree from New England College of Optometry.
1977-present: Part time Practice limited to Low Vision Rehabilitation. Tallman Eye Associates, North Andover, MA
2008- present: Low Vision Rehabilitation Consulting, LLC, Newburyport MA
1979-2004: Associate Medical Director, Vision Rehabilitation Service, Mass. Eye and Ear Infirmary, Boston MA
Clinical faculty, Harvard Medical School, Boston MA
Adjunct faculty: Boston University School of Medicine and University of Massachusetts Graduate School of Education (Orientation & Mobility Program)

* 1999- Low Vision Diplomate mentor and annual LV D candidate case reviewer, proctor / participant for written, ocular disease, practical exam, oral exam
CANDIDATES LEARN AND COMMUNICATE ACADEMIC AND PRACTICAL ABILITY TO PROVIDE INDIVIDUALLY FOCUSED COMPREHENSIVE LOW VISION EXAMINATIONS.

CASE REPORTS ARE THE CENTER OF THE PROCESS:
CANDIDATE TO CLINICAL LV DIPLOMATE
PATH TO DIPLOMATE IS A LEARNING PATH

CASE REPORTS DEMAND UNDERSTANDING OF ALL ASPECTS OF LOW VISION PATIENT CARE, SO SERVE AS AN EXCELLENT TOOL TO COMMUNICATE AND EXCHANGE KNOWLEDGE AND CLINICAL APPROACHES.
CANDIDATE KNOWLEDGE OF ESSENTIAL LOW VISION EXAMINATION ELEMENTS ARE DEMONSTRATED IN CASE REPORTS WHICH PREPARE THE CANDIDATE FOR SUCCESSFUL COMPLETION OF:

- written exam: optics, general knowledge base
- ocular disease exam: major ocular diseases affecting visual function, current research, disease issues that can present in a low vision practice.
- practical exam: patient interaction, exam skills.
- oral exam: Questions related to submitted cases.
AAO WEBSITE SAMPLE CASE SERVES AS A REFERENCE FOR FORM AND CONTENT

- LV Diplomate candidate selects, develops and prepares cases as in AAO sample to demonstrate knowledge of the essentials in a low vision exam and case management.

- Sample case serves as guide for order and comprehensiveness.

- Mentor serves as a resource.
THE COMPREHENSIVE LOW VISION EXAM

History: medical, social, family; CC; VFQ
review of report, medical record

Baseline testing: acuity, CSF, VF, CV, Glare...

Refraction, mag: relative, size, distance,
Technology, electronic magnification systems
Illumination, glare control, filters
VF Enhancement: minification, prism

Rationale for clinical procedures and results

Medical decision-making: Rxs, adaptive
strategies, patient education, counseling,
reports, coord. with related caregivers,
community resources

Follow-up, prognosis

Supporting research, references
COMPREHENSIVE LOW VISION EXAM
+ CASE REPORTS REQUIRE

- **History**: patient medical, social, family history beyond typical eye exam: example—does the patient live alone? Who is available for help when needed? What mode of transportation was used to the appointment? Any co-morbidities? Is patient a care-giver?

- **Chief Complaint / Goals and Needs**: Visual Function Questionnaire; individually focused, depending on age, dx, demographic, home, community, school, work, if disabled, associated losses.

- **Review** the medical record or referral/consultation report(s) and testing. Testing within 12 months, no VA change.

- **Baseline testing**: tools, techniques. Example: describe charts used, M notation, which (CSF) testing tool used, how were the results interpreted?

- **Intervention**: examination procedures and rationale, based on age, dx, demographic, secondary losses, home, family, school, work, community.
COMPREHENSIVE CASE REPORTS
+ LOW VISION EXAM
REQUIRE

- **Understanding of system optics**: TSs, TMS, stand mag w add, vergence amplification, relative distance, size, angular magnification, equivalent lens power, prism diopter/degree, technology and magnification (Nowakowski ch 10).

- **Rationale** for performing or not performing standard Low Vision exam procedure; if omitted, why. What would have been your expected result, based on available knowledge. What was the substitute test or observation used?

- **Medical decision making**: for refraction, optical, electronic and non-optical devices, adaptive approaches, patient education, counseling, team member contributions to care (what is the professional structure of the LV service), order testing, referrals such as genetic counseling (or through referral source), coordination with community resources (ex. O & M, PT, OT, Rehabilitation Teacher), order special testing (retinal photos, corneal topography, etc.).

- **Follow-up, co-management**.

- **Reports**.

- **Research** supporting the patient education and medical decision making.
MEDICAL DECISION MAKING

RXS: OPTICAL, ELECTRONIC, NON-OPTICAL, ADAPTING TECHNOLOGY

ADAPTIVE STRATEGIES, TECHNOLOGY

PATIENT EDUCATION, COUNSELING

PROGRAM TEAM CONSULT/CONTRIBUTIONS TO CARE

ORDER SPECIAL TESTING: EX. RETINAL PHOTOS, CORNEAL TOPOGRAPHY

REFERRALS: EX. GENETIC COUNSELING

COMMUNITY RESOURCES: LOCAL, STATE, FEDERAL, PRIVATE & PUBLIC

CONSULT/REPORT TO CARE PROVIDERS/REFERRAL SOURCE

FOLLOW-UP CARE, CO-MANAGEMENT
ATTEND TO DETAILS IN EXAM + REPORT

Follow logical order – template:

• History, CC, VSQ, referral report review
• Baseline testing
• LV Intervention
• Interpret results, rationale
• Medical Decision making:
  • Rxs, adaptive strategies, education/counseling, referral to professional team members.
  • Professional referrals: ex. genetic counseling
  • Community resources
  • Report to care providers
  • Follow-up, co-management
• Support decisions: references, current research

Use clear concise documentation
PRACTICE MUST PROVIDE A SELECTION OF TRADITIONAL CASES TO BUILD SKILLS AND DEMONSTRATE KNOWLEDGE IN CR

- Albinism with Nystagmus
- Age-related Macular Degeneration
- Retinitis Pigmentosa
- Diabetic Retinopathy
- One Case: child
- One Case: full telescopic evaluation
- (Recommend) One Case: focus of your practice
ALBINISM: PHOTO BY ANGELINA D’AUGUSTE TO CELEBRATE ALBINISM

ALBINISM: ACCOMPLISHED CLINICIAN SHOULD ADDRESS SPECIAL NEEDS OF THIS POPULATION IN THE EXAM AND MEDICAL DECISION MAKING RELATED TO DIAGNOSIS, AGE GROUP, VISUAL NEEDS: SENSITIVITY TO LIGHT, MAGNIFICATION, OPTICAL, NON-OPTICAL, AND TECHNOLOGICAL SOLUTIONS, ADAPTIVE STRATEGIES, HX./GENETIC TESTING TO IDENTIFY SYNDROMES, COMMUNITY RESOURCES, SUPPORT GROUPS FOR FAMILIES, REFERENCE ONGOING RESEARCH.
AGE-RELATED MACULAR DEGENERATION

COHORT, INTERVENTION FOCUS, MAGNIFICATION, PRL, CSF, CENTRAL SCOTOMA, ADAPTIVE APPROACHES (ECCENTRIC VIEW TRAINING), ASSOCIATED LOSSES, MEDICAL DECISION MAKING, PATIENT EDUCATION: DIET AND SUPPLEMENTS, DISCONTINUE SMOKING; DRIVING ISSUES, COMMUNITY RESOURCES, TREATMENT OPTIONS, FOLLOW-UP, RESEARCH.
RETINITIS PIGMENTOSA

COHORT, INTERVENTION FOCUS, PERIPHERAL FIELD LOSS, CSF LOSS, ADAPTIVE APPROACHES, OPTICAL/ELECTRONIC SOLUTIONS, FOCUS OF PATIENT EDUCATION, SYNDROMES, ASSOCIATED LOSSES, COMMUNITY RESOURCES, MEDICAL DECISION MAKING, TREATMENT, GENETIC TESTING, FOLLOW-UP, MEDICAL AND REHABILITATION RELATED RESEARCH.
DIABETIC RETINOPATHY

OCULAR AND SYSTEMIC DISEASE PROGRESSION, CURRENT PRACTICES, MANAGEMENT, FLUCTUATING ACUITY LOSS, CSF LOSS, PERIPHERAL FIELD LOSS, MAGNIFICATION, CONTRAST ENHANCEMENT NEEDS, ADAPTIVE APPROACHES, GENETICS, FAMILY, COMMUNITY RESOURCES, PATIENT EDUCATION/COUNSELING, CO-MANAGEMENT, COMMUNICATION WITH PCP, WORKING AGE POPULATION/DISABILITY, FOLLOW-UP, RESEARCH, REFERENCES.
CLINICIAN/CANDIDATE MUST BUILD AND DEMONSTRATE CLINICAL EXPERTISE FOR COMMON SOURCES OF VISION LOSS

OCA  AMD  RP  DR  +1

LV CLINICIAN MUST DEMONSTRATE EXPERTISE FOR DXS, ACROSS AGE GROUPS, SETTINGS, GOALS, DEVICES, ADAPTIVE APPROACHES, KNOWLEDGE OF COMMUNITY RESOURCES, CURRENT RESEARCH FOR TREATMENT OPTIONS AND REHABILITATION.

• 1 Case: Child—any age up to 17: focus on school needs, reports, Americans with Disabilities Act, accommodations in seating, testing, use of devices, importance of annual testing, coordination with teachers of visually impaired.

• 1 case: Full Telescopic Evaluation (bioptic): any age/ diagnosis
• Attend primary goal/need first.

• Most patients expand on goals in follow-up exams as they learn. How do you assist?

• Write goal-oriented Case Report

• Not a Chihouly Chihouly Museum, Seattle
ESSENTIAL KNOWLEDGE
PROVIDE EDUCATIONAL MATERIALS

1. KNOW THE DEFINITION OF LEGAL BLINDNESS AND HOW TO DETERMINE. EDUCATE THE PATIENT; PROVIDE EDUCATIONAL MATERIALS.

2. KNOW HOW TO EDUCATE PATIENTS ABOUT THE AMERICANS WITH DISABILITIES ACT AND HOW YOU CAN/DO ADVOCATE AND COORDINATE WITH COMMUNITY RESOURCES FOR YOUR PATIENTS IN LEARNING/WORKING ENVIRONMENTS.

3. KNOW/ADDRESS DRIVING WITH IMPAIRED VISION IN YOUR STATE, ADJACENT STATES—KNOW THE DRIVING REQUIREMENTS AND WHEN/IF YOU WOULD RECOMMEND LIMITING DRIVING IN CASES WHERE THE STATE DMV DOES NOT LIMIT (ORAL EXAM Q).

4. KNOW THE FITTING/CARE OF SPECIALTY CONTACT LENSES AND PROSTHETIC EYE—OR REFERRAL PER RELEVANCY IN YOUR SETTING.

5. KNOW/RELATE WHEN YOU WOULD CONSULT WITH OTHER CAREGIVERS.
ESSENTIAL KNOWLEDGE
PROVIDE EDUCATIONAL MATERIALS

6. RE GENETIC COUNSELING: KNOW, ADDRESS HOW YOU WOULD ARRANGE FOR YOUR PATIENTS WITH HEREDITARY CONDITIONS WHO SEEK CARE IN YOUR OFFICE.

7. RELATE YOUR COMMUNICATION APPROACH WITH RELEVANT CARE GIVERS, COMMUNITY RESOURCES.

8. KNOW, DEVELOP, COMMUNICATE YOUR SETTING’S REHABILITATION TEAM AND HOW YOU COORDINATE CARE WITHIN YOUR PRACTICE AND WITH COMMUNITY RESOURCES.

9. RELATE HOW YOU COORDINATE FOLLOW-UP CARE IN YOUR PRACTICE.

10. ADDRESS RESEARCH FOR TREATMENT, REHABILITATION, DEVICES: EX. INTRA-OCULAR TELESCOPE.

11. LIST YOUR REFERENCES.
SUMMARY: PROVIDING COMPREHENSIVE LOW VISION EXAMINATIONS AND CASE REPORTS

- Comprehensive case history, CC, VFQ
- Review of referral report or medical record
- Comprehensive baseline testing
- LV refraction
- Individually focused LV intervention. Explain optics and strategies focused on patient needs and goals.
- Results and rationale for testing approaches.
- Medical decision-making: Rxs, adaptive strategies, team member referrals, patient education, counseling.
- Professional referrals.
- Coordination and referral for community resources.
- Follow-up, co-management.
- Reports to care givers, referral source.
- Research, references.
SUMMARY: CASE REPORTS

• Develop and demonstrate knowledge of LV exam, low vision population and sub-population needs.

• Select five straightforward cases at the start that demonstrate and challenge your knowledge in this process.

• Use CR preparation to help prepare for the LV diplomate exams: written, ocular disease, practical, oral.

• Follow the format of the sample case report and template in this course.

• Communicate with your mentor, LV diplomates.

• Set aside the necessary time to complete the process.
REFERENCES: EXAMS/CASES

1. PRIMARY LOW VISION CARE
   BY RODNEY W. NOWAKOWSKI

2. NIH WEBSITE FOR CURRENT RESEARCH
   FOR EACH EYE DISEASE/EACH CASE
   WWW.NIH.GOV

3. THE WILL’S EYE MANUAL, 6TH EDITION
   ADAM T. GERSTENBLITH MD; MICHAEL P. RABINOWITZ
   MD (GREAT IN OFFICE REFERENCE) FOR GENERAL
   KNOWLEDGE.
GET STARTED

Connect with a mentor, other LV diplomates.

Develop a referral network to increase your Low Vision patient population.

Make time in your calendar.

Know you won’t have more free time in the future to pursue this goal.

Review sample case, template.
You are here today because you want to learn the best approaches for providing high quality low vision care and you are seriously considering pursuit of the LV Diplomate.

We are here today to help guide you.

I hope this has been helpful in giving you a structure and knowledge in this pursuit.

Let’s continue...
THANK YOU

Questions    Discussion
Comprehensive Low Vision Case Reports Template

History:
medical, social, family
home, family, school, work, community

Chief Complaint/Visual Skills Questionnaire

Review of Medical Record/Referral Report: within last 12 months, stable

Baseline Testing: acuity: charts, M notation, CSF, CV, glare sensitivity, VF

Individually focused Low Vision Intervention, based on needs and goals:
based on age, dx, demographics, 2ndary losses
refraction; magnification: distance, intermediate, near
optics of systems, vergence amplification, equivalent power.

contrast/Illumination/glare control
Visual field enhancement:
minification/ image displacement (prism diopters /degree)
adaptive approaches

Interpret Results, Rationale of Testing

Medical Decision making:
refractive Rxs,
optical, electronic and non-optical devices,
adaptive strategies, adapting technology,
patient education, counseling,
professional team member contributions to care,
order special testing.

Professional referrals: ex. genetic counseling

coordination with community resources
(local, state, federal, public & private)

Consult/Reports to Care Providers/Referral Source

Follow-up, Co-management

Supportive Research for Approach & Patient Education