I. Introduction

A. Epidemiology and societal impact
   i. Demographics of drivers
   ii. Research disparities between older and younger drivers
   iii. Driving is the chief complaint in 28% of patients seeking outpatient low vision rehabilitation (LVR) services, second only to reading at 66% of patients. (Brown 2014; in press)
   iv. Future impact on psychological and vocational health: Patients with congenital and early onset vision loss require a unique perspective regarding judging potential driving ability.

B. New research

   i. Males are more likely to report driving difficulty (36.2% vs. 23.6%, p<0.001)
   ii. Visual acuity was not predictive of driving as a chief complaint among patients seeking services, which may reflect the increased prevalence of driving cessation with worse VA.
   iii. Younger subjects were more likely to report driving concerns than older subjects (OR=0.87 per 10 year increment in age, 95% CI: 0.8-1.0).

II. Case study introductions

A. 16 year-old high school student with dominant optic atrophy living in rural Maryland want to obtain driving license. Father has same condition and was able to gain driving ability.

B. 17 year-old high school student from New Jersey with recently diagnosed Stargardt’s Maculopathy wants to gain driving privileges.

C. 20 year-old male with history of resection of cystic astrocytoma 2004 which compressed left optic nerve and Asperger’s has learner’s permit, and has completed behind the wheel hours with family and friends unbeknownst to his father. Patient brought in by father for an opinion on whether his son is capable of driving.
III. Evaluating the patient

A. Chief complaint
   i. Motivation for driving
   ii. Concerns / insight into driving

B. Observation
   i. Physical
   ii. Cognitive
   iii. Emotional

C. HPI
   i. Awareness and understanding of disorder and impairment
   ii. Stable
   iii. Progressive
   iv. Regressive

D. ROS

E. Academic history

F. Social history

G. Driving history

H. Support

I. Functional visual assessment
   i. Visual acuity
   ii. Refraction
   iii. Contrast sensitivity
   iv. Visual field (central and peripheral)
   v. Glare assessment
   vi. Response to treatment strategies
      • Refractive correction
      • Telescopc considerations
      • Filter use
      • Behind the wheel assessment and training
J. Ocular health evaluation
K. Evaluate secondary sources/information

IV. Considerations regarding licensure and restrictions

A. State-imposed licensure restrictions
B. Special state programs
C. Doctor-imposed license restrictions
D. Self-imposed restrictions by patient

V. Discussion and counseling

A. Does the patient think they would be a good driver? How do they know?
B. In cases of progressive vision loss, what would it mean to gain and then lose driving privileges?
C. What is the commitment to training?
D. Timing – why is license important at this time? Can it wait?

VI. Ethical considerations

A. Patient confidentiality
B. State reporting law
C. Personal considerations

VII. Communication with the patient

A. Timing discussion with patient carefully
B. Consider who should be present during discussion
C. Empathy, practicality, firmness
VIII. Outcome of 3 driving in low vision cases presented in introduction

IX. Conclusions


