WHAT QUESTIONS DO GLAUCOMA PATIENTS ASK?

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DISCLOSURES

- none

PATIENT EDUCATION

- Why
  - Outdated materials
  - Dr. Google
    - This led to occasional visits from patients with the dreaded memes of pages from the Internet, where he talked up our schedule with patients who self-diagnosed and self-educated from ideas that were neither credible nor reliable.

PATIENT EDUCATION

- How
  - Ask the patient what they understand about their diagnosis.

GET ON THE HOTLINE!

Doc you said I have what?

Glaucoma

What is it?

Let me explain.
GLAUCOMA

A group of ocular diseases with various causes that ultimately are associated with a progressive optic neuropathy leading to loss of vision function.

Degenerative optic neuropathy characterized by progressive loss of retinal ganglion cells, leading to a loss of visual function.


GLAUCOMA SIGNS AND SYMPTOMS

- Early to Moderate Disease
  - Very little
  - High IOP?

- Late to Severe Stage
  - Very little -> complete vision loss
  - Redness?
  - Light sensitivity?
  - Severe Pain?

BLINDNESS AND GLAUCOMA

- What do you consider blindness?
  - Central visual acuity of 20/200 or worse in the better eye with the best possible correction, and/or a visual field of 20 degrees or less.

- Ability to Perform Vision-Related Activities?
- Vision-Related Quality of Life (QoL)?

- Clinician’s ultimate goal is to address patients’ concerns, which usually are centered on improving or at least maintaining their QoL and their ability to function.
BLINDNESS AND GLAUCOMA

- Common tests for vision-related assessment
  - National Eye Institute's Visual Functioning Questionnaire (NEI-VFQ-25)
  - Self Reporting
  - Assessment of function related to vision (AFREV)
    - Above + VF, VA, Contrast Sensitivity
  - Compressed Assessment of Ability Related to Vision (CAARV)
    - Motion detection, facial recognition, reading street signs, finding objects in a room

BLINDNESS AND GLAUCOMA

- Virtual related activities: Quality of Life - Clinical findings
  - Feyzahan et al
  - Contrast sensitivity and VF strongly correlate with CAARV compared to VA, IOP and Et.
  - [Good VA can have low CAARV scores due to poor VF and contrast sensitivity]

Grant et al in the 1980’s
- Essentially legal blindness criterion
- About 12.4% blind in both eyes from Glaucoma

Hattenhauer et al, Cumulative incidence for blindness (when treated)
- 54% in at least ONE eye
- 22% in BOTH eyes
- (1960-70s, pilo meds, poor Sx techniques)

African Americans are at higher risk for Glaucoma
- Hiller and Kahn, Leske and Rosenthal, Wilensky et al

GLAUCOMA AND BLOOD PRESSURE

- Quick Anatomy Lesson
  - Internal Carotid -> Ophthalmic
  - High BP, High Aqueous production ( smarty pants)

Hasselhoff @DontHasseltheHoff

I lowered my blood pressure, so my eye pressure is lower, right?

Dr Smith @EyeEducate

Yes. Your eye pressure may not be an issue.
GLAUCOMA AND BLOOD PRESSURE

- Low Perfusion Pressure
- Poor ONH blood supply

Confusing and sometimes contradictory.

- IOP is often higher (on average) in people with higher BP
- Perfusion pressure at the optic nerve is also higher

Homeostasis compensation
- Ex. exercise
- HBP for long time -> decreased circulation

GLAUCOMA TREATMENT

- Drops vs. Laser vs. Surgery

Drops
- Good efficacy, Many to try, variable side effect profile (mostly low)
- 20% to 30% IOP reduction from baseline
- Compliance???

Laser
- Studies state... Selective Laser Trabeculoplasty (SLT) roughly equivalent in safety and efficacy to medication with one drug. These same studies report that SLT has few side effects, eliminates many compliance issues and saves money.
- Support first line for: POAG, OHT, NTG, and PXFG
- Mean IOP decrease 30%
- Lasts up to 30 months and even up to 5 yrs

GLAUCOMA TREATMENT

- Surgery
  - Trabeculectomy
- Tube Shunt

Glaucoma treatment

- Da Ganja!
  - Lowers IOP!!
    - but only for 3-4 hrs
  - Only 60% to 65% of individuals experience intraocular pressure reduction


Glaucoma treatment

- Smoking vs Edibles
  - Smoking
    - Long-term toxic effects
      - Respiratory
      - Hormonal
      - Pulmonary
    - Drug absorption is maximum with smoking
    - Euphoric effects with both


Glaucoma treatment

- Topical Administration
  - Aqueous-based solution
  - Retains IOP-reducing activity without euphoric effects
  - Better than currently available treatment?


Taylor Swift
@TooSwift

@EyeEducate I was up late performing. I crashed and forgot to take my drops. What should I do?

Dr Smith
@EyeEducate

@TooSwift We are all human. Take your drops as soon as you remember.
MISSED DOSE

- Taking your eye drops consistently reduces the likelihood of pressure fluctuation (diurnal variation).
- Why use drops at bedtime?
- Inconsistent use of drops will vary the intraocular pressure (IOP) and has been scientifically proven to be detrimental to your glaucoma.
- 67% of peak IOP occurs outside of typical office hours.
- Continue your regular dosing whenever you remember, even if it seems like you are doubling up within a few hours.


HOW DO YOU GET GLAUCOMA?

- Glaucoma is not contagious. It typically develops from many different risk factors.
  - 50% thought to be genetic


Risk Factors
- High internal eye pressure
- Black or Hispanic race (Asians?)
- Family history
  - Parents: 2x’s greater
  - Siblings: 4x’s greater
- Eye injury
- Thin Corneas
- Sleep Apnea


HOW DO YOU GET GLAUCOMA?

- Controllable risk factors
  - Don’t smoke
  - Exercise
  - Be careful of corticosteroid usage
  - HTN and DM
  - Stress?

LOW VISION RESOURCES

- Low vision rehabilitation services
- Public Transportation
- Audible resources for newspaper, books, etc.

LOW VISION RESOURCES

- Low vision rehabilitation services
- Is patient a Veteran?
- Optometry or Ophthalmology school close by?
- Centers for blind and visually impaired
- Guide Dogs for America

LOW VISION RESOURCES

- Public Transportation
- City Train/Bus
- Individual transportation
- Access
- Taxis
- Uber
- VoiceOver App

LOW VISION RESOURCES

- Audible resources for newspaper, books, etc.
- Audio Books
- Audible
- Audio Editions
- News Outlets
- NPR News
- Newspaper transcribed into Audio
- Braille
- GLASS (resource in ATL)

REFERENCES


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