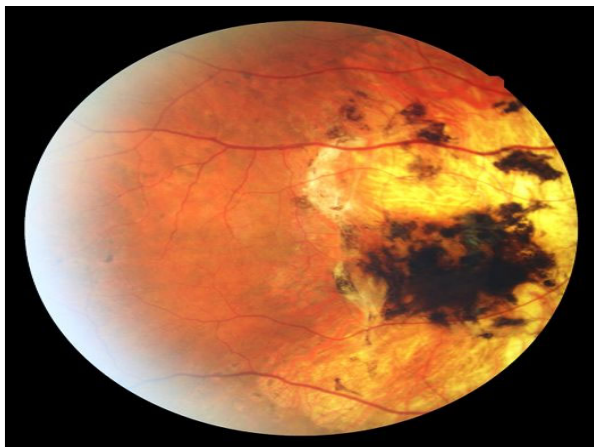


Role of the Ophthalmic Technician in Vision Rehabilitation

Joe Fontenot MD, CLVT

Disclosure

Dr. Fontenot has
nothing to disclose



CSV **COMMUNITY**
SERVICES for VISION
REHABILITATION

Joe Fontenot, M.D.
Cheri Glaus, O.D.

MISSION

To provide accessible,
compassionate, modern,
comprehensive and
multidisciplinary care
to those with vision loss

Techs doing more

"Ophthalmic techs are doing more now.
In the past, Ophthalmologists took primary
responsibility for all three phases of eye
care: (1) assessment and diagnosis (2)
medical/surgical treatment (3) patient
education "

Amer. Academy of Ophthalmic Executives
2011 www.aao.org/aaoesite

What is low vision?

IMPAIRED VISION

Interfering with normal activities

NOT CORRECTED

by standard eye care or glasses

NORMAL

20/12 to
20/25

LOW VISION

20/50 to
20/1000

Moderate

20/50 to 20/160

Severe

20/200 to 20/400

Profound

20/500 to 20/1000

NEAR BLIND

20/1200 to
20/2500

BLIND

NO LIGHT
PERCEPTION

LEGAL BLINDNESS

in US-20/200 or
Visual field 20
degrees or less

BLINDNESS

VISION SUBSTITUTION

LOW VISION

VISION ENHANCEMENT

TYPES

Generalized
CENTRAL
Peripheral

WHAT DO THOSE WITH LOW VISION SEE?

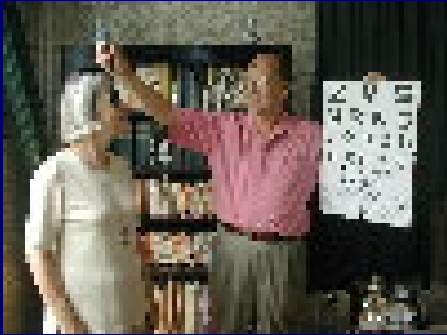
GENERALIZED

$160 \text{ pix} = 20/250, 0.08$




20/12
20/16
20/20
20/25
20/32
20/40
20/50
20/63
20/80
20/100
20/125
20/160
20/200
20/250
20/320
20/400
20/500
20/630
20/800
20/1000
20/1250
20/1600
20/2000

100 pix = 20/400 , 3/60 , .05
Severe Vision Loss



20/12
20/16
20/20
20/25
20/32
20/40
20/50
20/63
20/80
20/100
20/125
20/160
20/200
20/250
20/320
20/400
20/500
20/630
20/800
20/1000
20/1250
20/1600
20/2000

50 pix = 20/800 , 0.025
Profound Vision Loss



20/12
20/16
20/20
20/25
20/32
20/40
20/50
20/63
20/80
20/100
20/125
20/160
20/200
20/250
20/320
20/400
20/500
20/630
20/800
20/1000
20/1250
20/1600
20/2000

CENTRAL



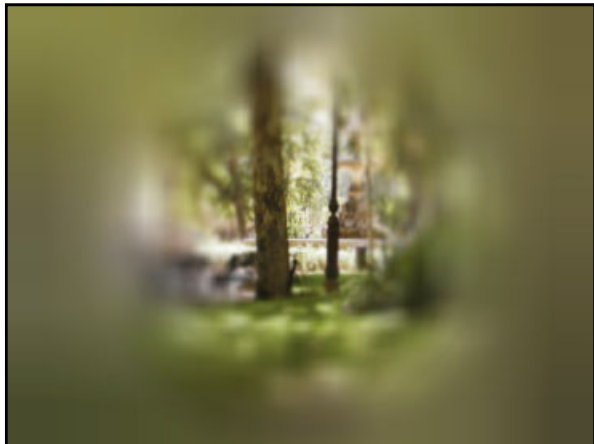
Scotoma

**VISUAL SKILLS
(PRL) TRAINING**

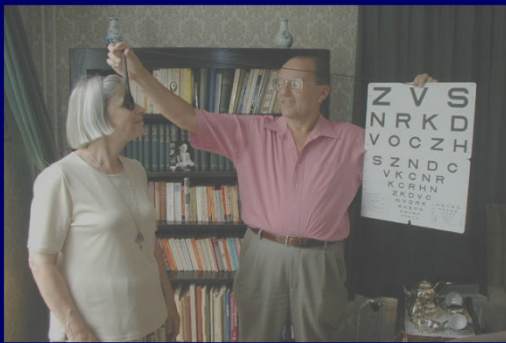
Learning how to move
the blind spot to see
better

CAT CAT

PERIPHERAL



Contrast loss



Contrast Enhancement





IMPACT

CANNOT:

- READ
- DRIVE
- RECOGNIZE FACES
- PERFORM MANY DAILY ACTIVITIES

LEADING TO

- DEPRESSION, ISOLATION
- LOSS of INDEPENDENCE
- FALLS, ACCIDENTS
- MEDICATION ERRORS
- HALLUCINATIONS and PANIC ATTACKS
- INCREASED MORTALITY

GRIEF

- DENIAL
- GUILT
- ANGER
- DEPRESSION
- ADAPTATOPM

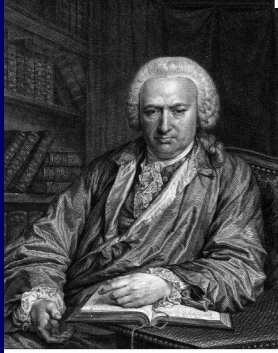
DEPRESSION

3X as common
More if functional
 limitations, less if
 none

Charles Bonnet

Visual hallucinations, common
 (10-20%) in patients with
 vision loss, esp. with ARMD
 Formed, often frequent
 Usually not volunteered by pt.

Charles Bonnet was a naturalist who, in 1769 described the hallucinations experienced by his visually impaired and cognitive intact grandfather.



**WHAT
DO
WE DO?**

1ST visit

- HISTORY
- FUNCTIONAL VISION EVALUATION

HISTORY

- EYE DISEASE and EVENTS
- CESSATION or LIMITATION of ROUTINE ACTIVITIES –DRIVING, READING, COMPUTER USE, etc.
- GOALS and CAPABILITIES
- GENERAL HEALTH, ACTIVITY
- MOTIVATION

FUNCTIONAL VISION EVALUATION

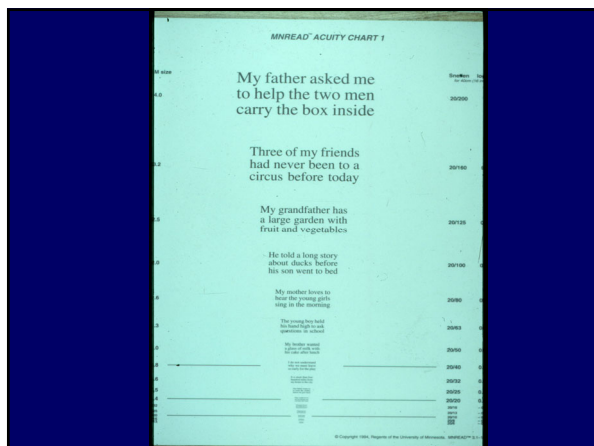
VISUAL FUNCTION

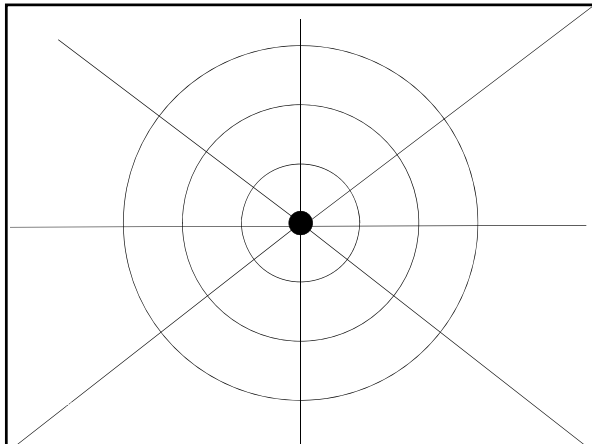
- ACUITY
- FIELD/SCOTOMA
- CONTRAST SENSITIVITY
- SCANNING/OCULOMOTOR
- GLARE SENSITIVITY
- COGNITION/PROCESSING

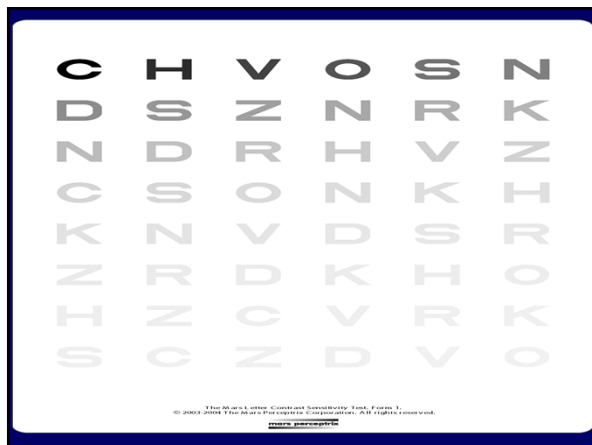


OTHER TESTS

- TIMED READING TEST
- CONTRAST SENSITIVITY
- CENTRAL FIELD









Different patients

- **Different** TRAINING, DEVICES, et. NEEDED for DIFFERENT DEGREES, TYPES of VISION LOSS or REHAB NOT SUCCESSFUL

MODERATE

20/50 to 20/160

- Improved lighting
- High-plus glasses
- Magnification, optical
- Some non-print (audio)
- Large print

SEVERE

20/200 to 20/400

- Same as moderate, plus
- Increased use of non-print, audio
- Electronic magnification
- Computer screen software for magnification, screen reading

PROFOUND

20/500 to 20/1000

- Optical aids, magnifiers of limited use
- Electronic magnification necessary for reading
- More non-print, tactile, audio
- Early use of Braille and O+M
- Non-GUI computer software

NEAR BLIND and BLIND

- BRAILLE, BRAILLE DEVICES
- WHITE TIP CANE, GPS
- LEADER DOGS
- COMPUTER ACCESS WITH KEYBOARD ONLY

WHAT do We Do?

EDUCATE

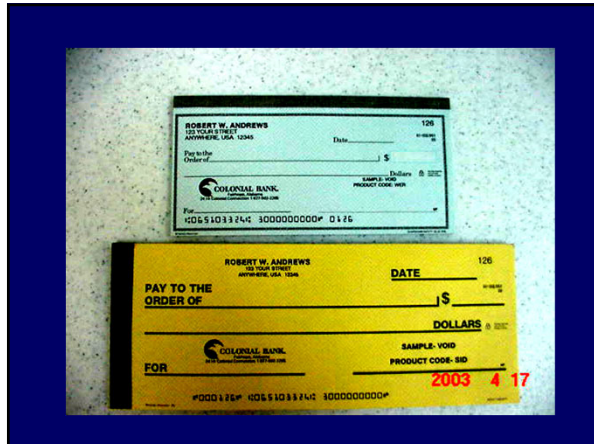
RELIEVE FEAR

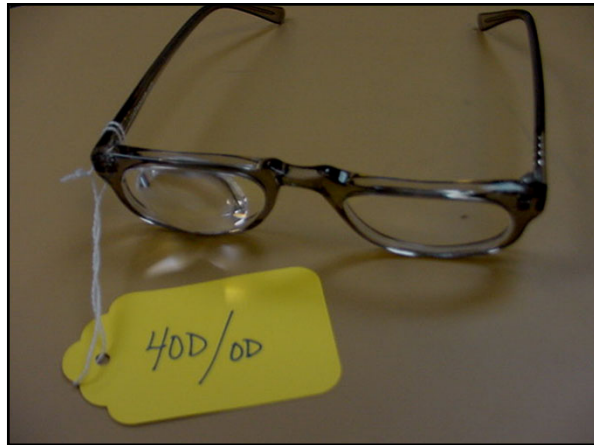
PROVIDE HOPE

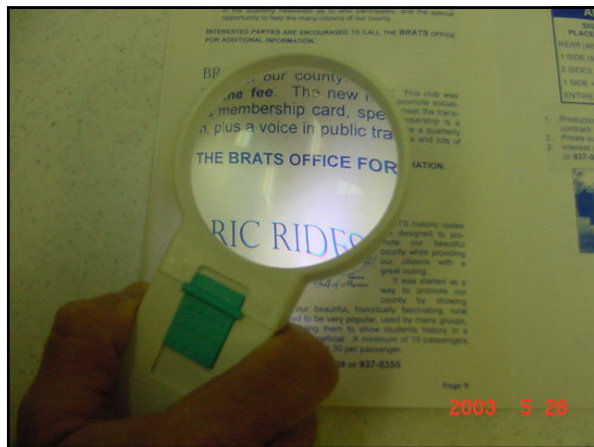


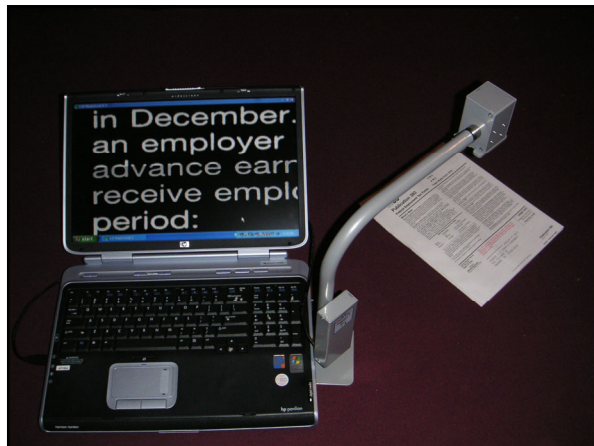




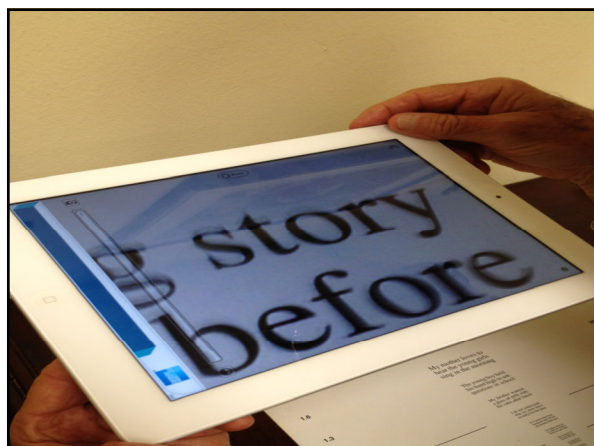


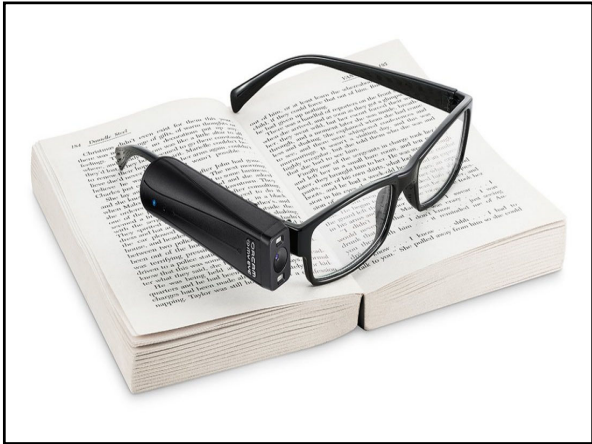






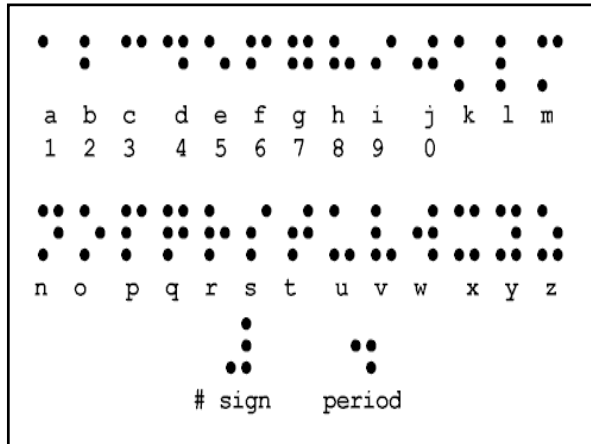














BOTTOM LINE

MUCH CAN BE DONE
TO HELP THOSE WITH
LOW VISION AND TO
ENABLE THEM TO HELP
THEMSELVES

HOW MANY RECEIVE LOW VISION CARE?

Philadelphia, 2006-16%

Alabama, 2018 - 11%

Baltimore, 2020- 20%

JCAHPO.org online courses in low vision

Continuing education courses
related to low vision

[tps://store.jcahpo.org/searchresult
s.aspx?categoryid=160](https://store.jcahpo.org/searchresults.aspx?categoryid=160) Continuing
education courses related to low vision
[https://store.jcahpo.org/detail.a
spx?id=LVKT1000](https://store.jcahpo.org/detail.aspx?id=LVKT1000)

VISION REHAB SERVICES

- Known LOCAL LOW VISION CLINICS
- GOOGLE "LOW VISION CLINIC" for your area
- STATE DEPARTMENT OF REHAB
- GO TO AAO.ORG, ENTER "SMART SIGHT PATIENT HANDOUT"
- WWW.CSVRLLOWVISION.ORG "Resources" list
- Sight Savers booth at meeting

Role of Ophthalmic Tech

Identify patient

Relieve fear, anxiety

Educate, Refer

**The
end**

**THANK
YOU**

**QUESTIONS
+
SUGGESTIONS**
