

# **CVP Continuing Education Winter Symposium**

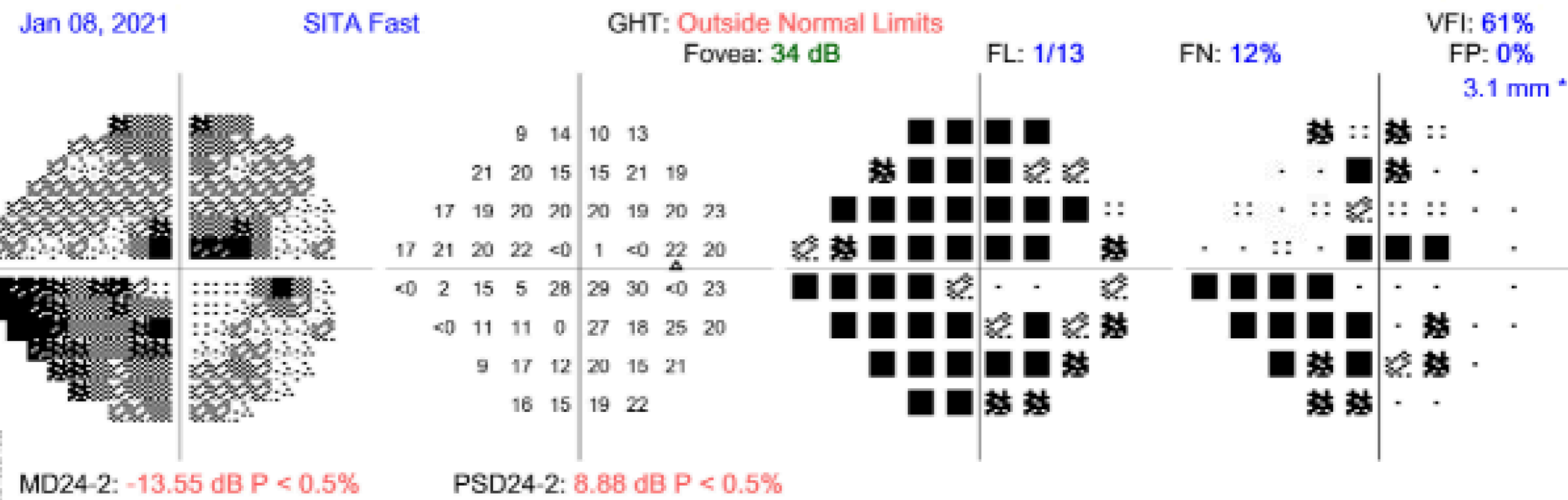
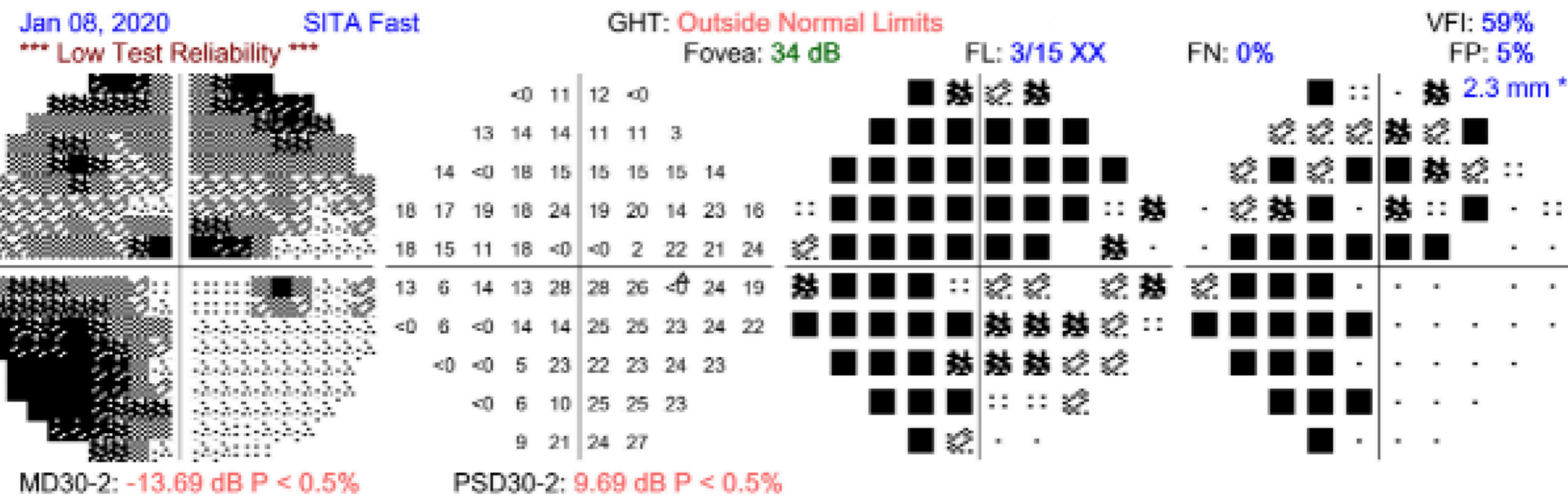
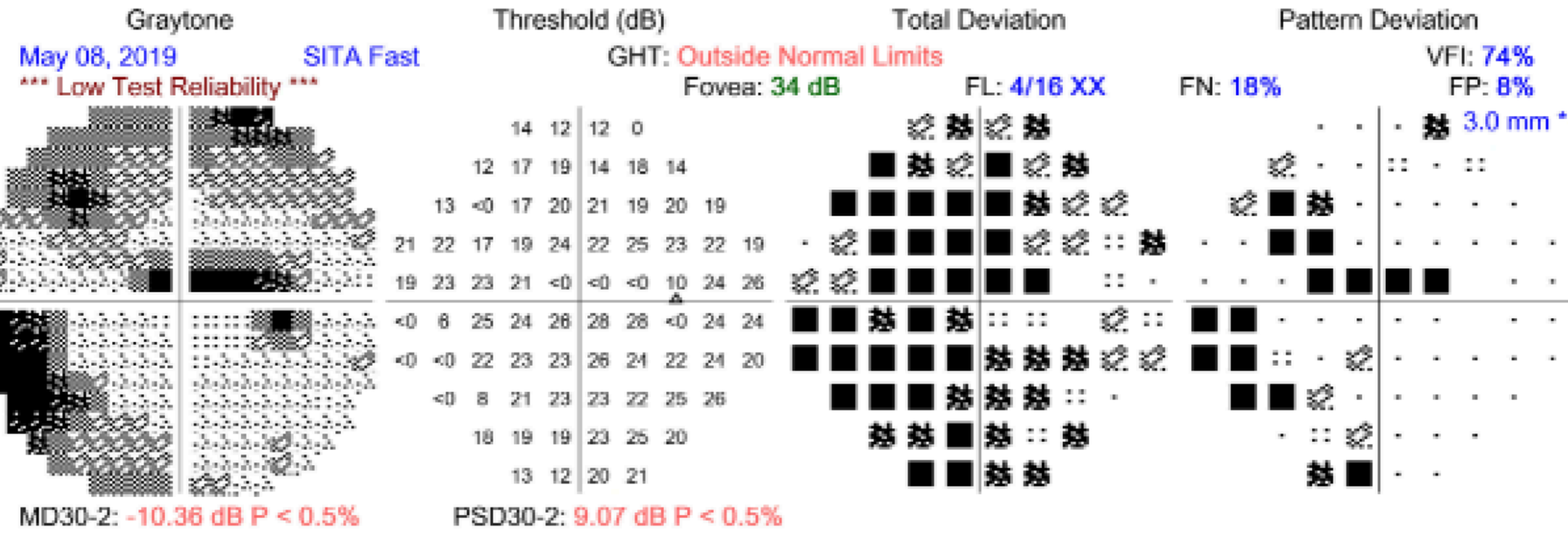
**Glaucoma Panel, Case Presentation**

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Glaucoma and Cataract Specialist  
Cincinnati Eye Institute  
23 Jan 2022**

# Case

## 84yo WF with worsening VF despite normal IOP

- BCVA 20/25 OU
- IOP OD:18 OS:17. On Lum 1/1 AlphP 2/2
- CCT OD: 590 OS: 601
- PCIOL OU
- ONH OD: CDR 0.8 OS: 0.6
  - thin inferior rim OU, no disc heme
  - OCT RNFL mostly on the floor
- s/p SLT OS 2015



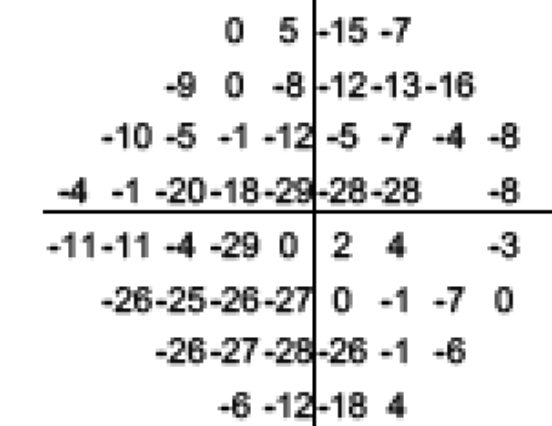
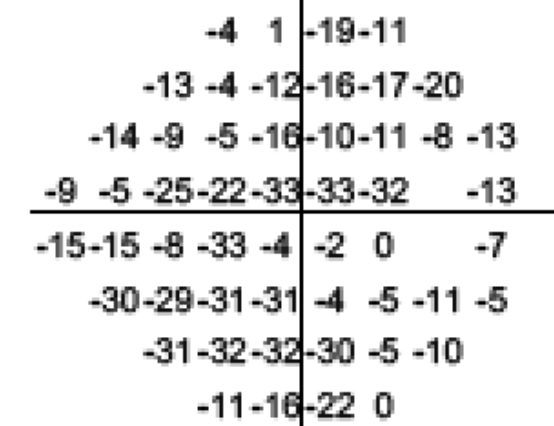
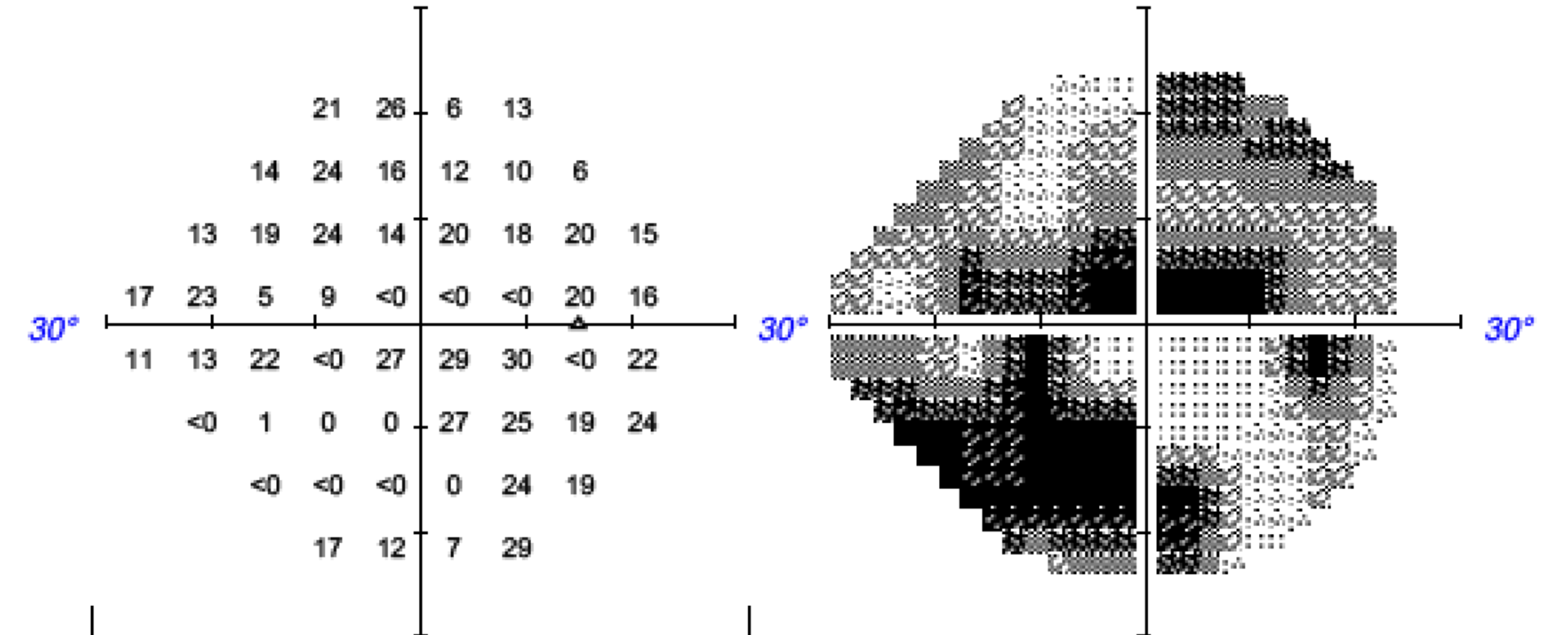
Legend: :: P < 5%, P < 2%, P < 1%, P < 0.5%



Fixation Monitor: Gaze/Blind Spot  
 Fixation Target: Central  
 Fixation Losses: 0/15  
 False POS Errors: 0%  
 False NEG Errors: 6%  
 Test Duration: 05:47  
 Fovea: 27 dB

Stimulus: III, White  
 Background: 31.5 asb  
 Strategy: SITA Fast  
 Pupil Diameter: 3.5 mm \*  
 Visual Acuity: Rx: +2.25 DS

Date: Jul 16, 2021  
 Time: 4:09 PM  
 Age: 83

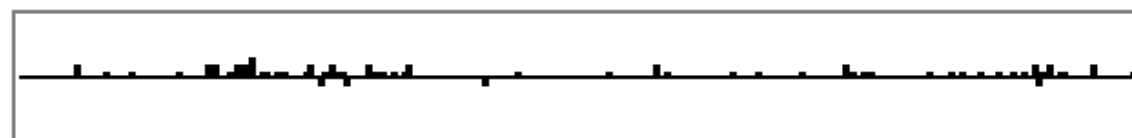


Total Deviation

Pattern Deviation

GHT: Outside Normal Limits  
 VFI: 51%  
 MD24-2: -16.27 dB P < 0.5%  
 PSD24-2: 11.49 dB P < 0.5%

Legend: :: P < 5%, P < 2%, P < 1%, P < 0.5%

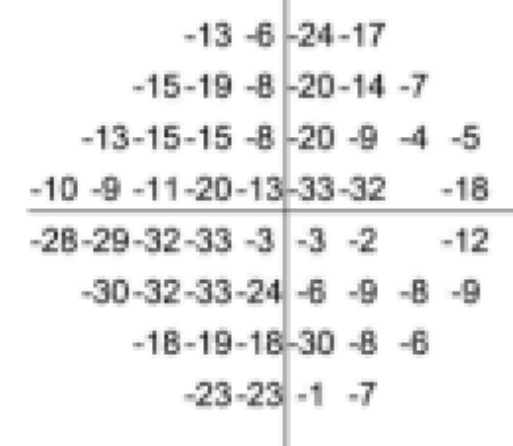
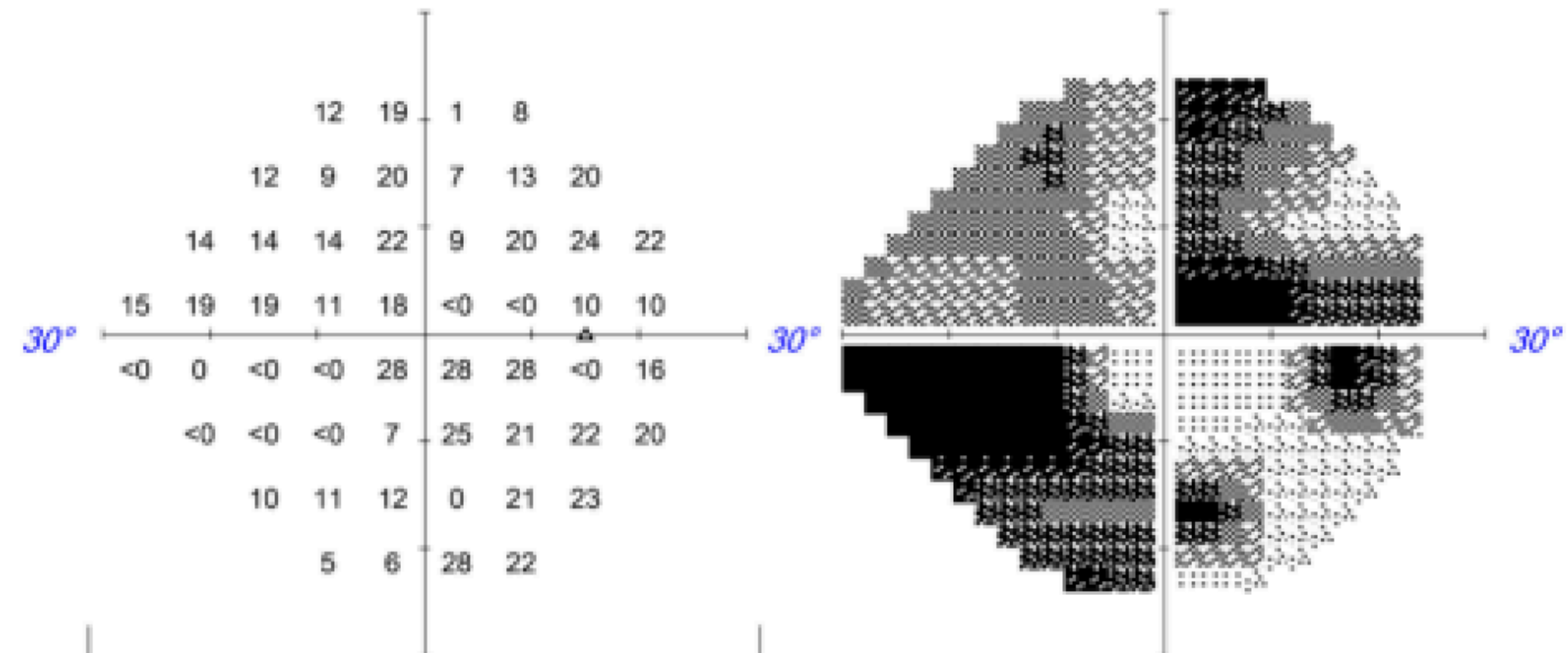


Comments

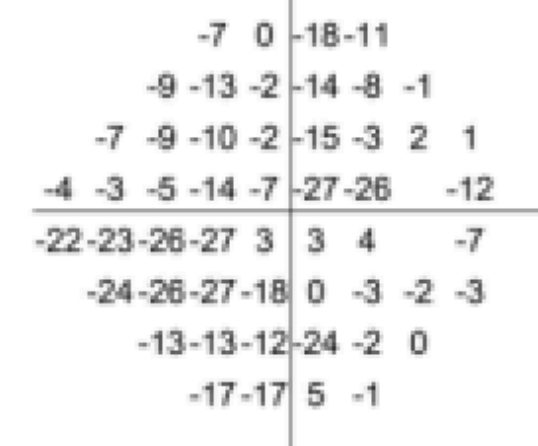


# VF progression confirmed

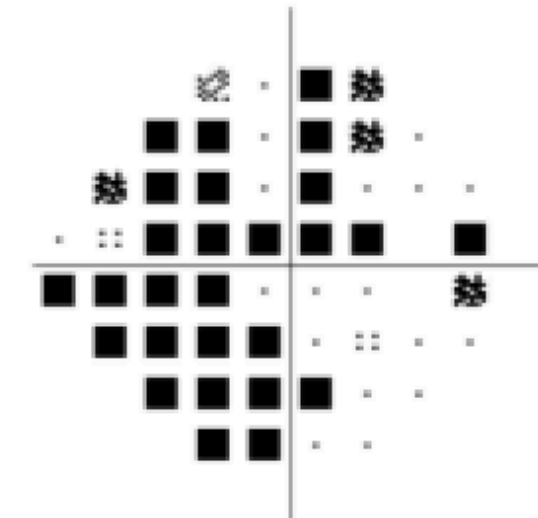
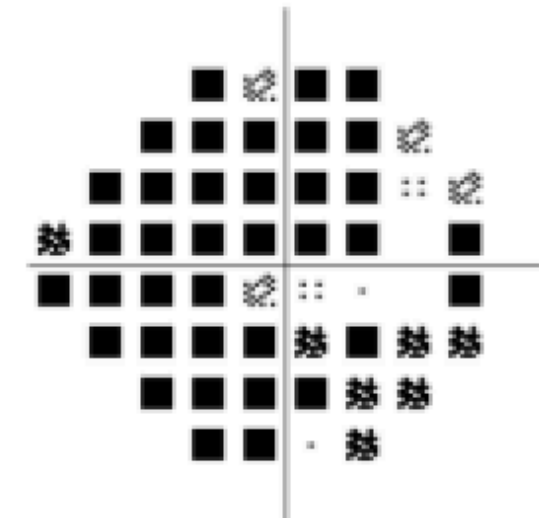
Fixation Monitor: Gaze/Blind Spot      Stimulus: III, White      Date: Nov 19, 2021  
 Fixation Target: Central                  Background: 31.5 asb                  Time: 2:49 PM  
 Fixation Losses: 1/13                      Strategy: SITA Fast                  Age: 84  
 False POS Errors: 6%                      Pupil Diameter: 3.5 mm \*  
 False NEG Errors: 7%                      Visual Acuity:  
 Test Duration: 05:29                      Rx: +2.25 DS  
 Fovea: 36 dB



Total Deviation



Pattern Deviation



GHT: Outside Normal Limits  
 VFI: 55%  
 MD24-2: -16.71 dB P < 0.5%  
 PSD24-2: 10.31 dB P < 0.5%

:: P < 5%  
 ☒ P < 2%  
 ☒ P < 1%  
 ■ P < 0.5%



Comments



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# Progressing VF OD

IOP, mmHg, GAT

<b>CCT 590/601</b>	<b>OD</b>	<b>OS</b>
<b>1/8/20</b>	14	15
<b>7/8/20</b>	14	13
<b>1/8/21</b>	16	17
<b>7/16/21</b>	14	14
<b>11/19/21</b>	18	17

# Medical History

- Hypertension
- CAD with h/o MI 1995
- ASA 81mg
- Amiodarone
- Celebrex
- Crestor
- Losartan
- Spironolactone

# Progressing Glaucoma Despite Reasonable IOP

## History Taking

- Adherence
- Diurnal variability
- Hypotension / Hypovolemia
- Sleep apnea
- Anemia
- Poor nutrition
- Valsalva
- GCA symptom screening +/-
- Consider other vascular etiologies

Published in final edited form as:

*Ophthalmology*. 2014 October ; 121(10): 2004–2012. doi:10.1016/j.ophtha.2014.04.016.

## **Nocturnal Systemic Hypotension Increases the Risk of Glaucoma Progression**

**Mary E. Charlson, MD<sup>1</sup>, Carlos Gustavo de Moraes, MD<sup>2,3</sup>, Alissa Link, MPH<sup>1</sup>, Martin T. Wells, PhD<sup>4</sup>, Gregory Harmon, MD<sup>5</sup>, Janey C. Peterson, EdD<sup>1</sup>, Robert Ritch, MD<sup>2</sup>, and Jeffrey M. Liebmann, MD<sup>2,3</sup>**

- Duration and magnitude of decrease in nocturnal blood pressure predict progression of Normal Tension Glaucoma



# Our patient

- Reports frequent systemic blood pressure to 60's/40's
- Has been on multiple blood pressure medications, most recently triamterene and spironolactone
- Contacted cardiologist to inform him of normal tension glaucoma progression and the associated risk factor of systemic nocturnal hypotension
- Cardiologist examined patient and reviewed history and stopped systemic hypertensive medications

# **Case: 84yo WF**

**IOP was 18mmHg in setting of VF progression**

- Already on Combigan and Lumigan, resistant to surgery
- SLT performed 12/9/21
- Most recent follow up 1/21/22, IOP was 15mmHg

# Thank you

- Panel Discussion