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## Dialysis-related nonarteritic anterior ischemic optic neuropathy in maintenance hemodialysis patient

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**Case Study :** Nonarteritic anterior ischemic optic neuropathy (NAION) is a rare complication in chronic hemodialysis patients. NAION is associated with many systemic processes, including intradialytic hypotension, anemia, and accumulations of toxin such as urea. A 65-year-old female with end-stage kidney disease presented right, painless vision loss following treatment with hemodialysis at 1 month ago. Fundoscopy revealed severe right chalky-white optic disc edema. Visual field examination showed a superior altitudinal defect in right eye. Her intradialytic blood pressure was significantly lower than her baseline and severely fluctuated. Treatments of NAION are not established and focus on optimizing the modifiable risk factors to prevent further complications. Her intradialytic blood pressure was stabilized and her dialysis sessions were changed. At the 1-year follow-up, the optic disc edema slightly resolved and her vision improved slightly. Intradialytic blood pressure must be closely monitored and dialysis protocol must be optimized to prevent the NAION.

그림 1\_NAION\_안저검사.jpg

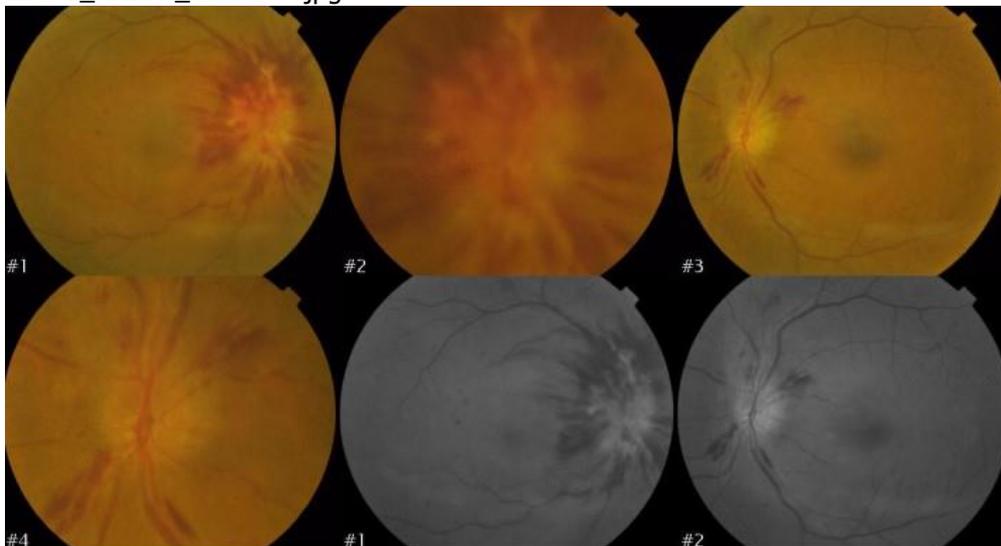


그림 1\_NAION\_안저검사.jpg

Central 30-2 Threshold Test

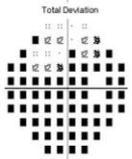
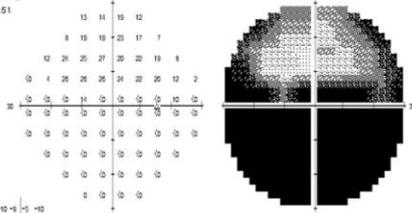
Fixation Monitor: Gaze/Blind Spot  
 Fixation Target: Central  
 Fixation Losses: 0/17  
 False POS Errors: 2 %  
 False NEG Errors: 0 %  
 Test Duration: 09:51

Stimulus: III, White  
 Background: 31.5 ASB  
 Strategy: SITA-Standard

Pupil Diameter: 8.2 mm  
 Visual Acuity:  
 RX: DS DC X

Date: 2022-12-15  
 Time: 12:28 PM  
 Age: 65

Fovea: 16 dB



Pattern Deviation not shown for severely depressed fields. Refer to Total Deviation.

GHT  
 Outside Normal Limits

VFI 22%  
 MD -24.90 dB P < 0.5%  
 PSD 13.17 dB P < 0.5%

Pattern Deviation

Pattern Deviation not shown for severely depressed fields. Refer to Total Deviation.

□ < 5%  
 □ < 2%  
 □ < 1%  
 ■ < 0.5%

Central 30-2 Threshold Test

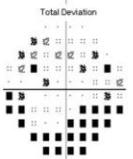
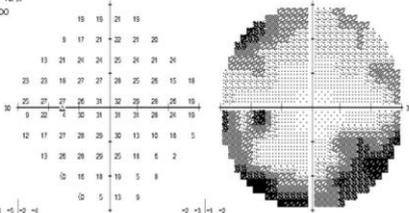
Fixation Monitor: Blind Spot  
 Fixation Target: Central  
 Fixation Losses: 3/21  
 False POS Errors: 4 %  
 False NEG Errors: 12 %  
 Test Duration: 09:00

Stimulus: III, White  
 Background: 31.5 ASB  
 Strategy: SITA-Standard

Pupil Diameter:  
 Visual Acuity:  
 RX: DS DC X

Date: 2022-12-15  
 Time: 12:40 PM  
 Age: 65

Fovea: 35 dB



GHT  
 Outside Normal Limits

VFI 90%  
 MD -7.69 dB P < 0.5%  
 PSD 8.61 dB P < 0.5%

Pattern Deviation

□ < 5%  
 □ < 2%  
 □ < 1%  
 ■ < 0.5%