

Supplement Images

Figure S1. FD-OCT images at the corresponding vertical locations in the retina in both eyes of the NAION patient; (a) right eye and (b) left eye. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

Figure S2. FD-OCT images at the corresponding vertical locations in the retina in both eyes of the ONHD patient; (a) right eye and (b) left eye. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

Figure S3. FD-OCT images from right (a) and left (b) eyes at the corresponding vertical retinal locations in the SLE/MS patient. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

Figure S4. FD-OCT images at the corresponding vertical locations in the retina in the left eye of the IIH patient. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

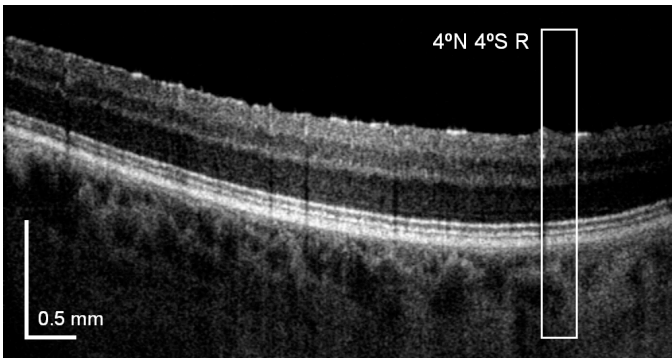
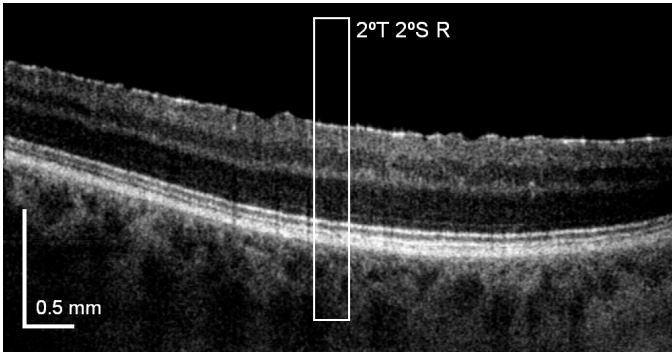
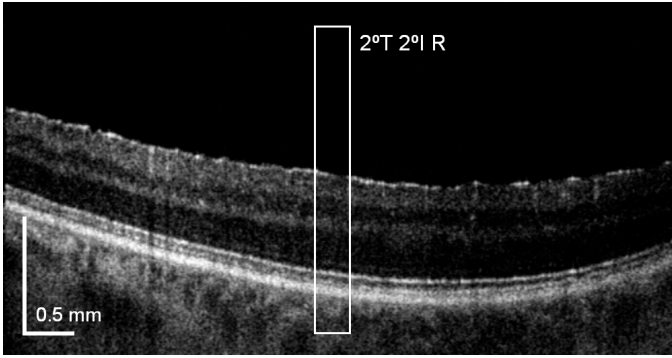
Figure S5. FD-OCT images at the corresponding vertical locations in the retina in the left eye of the MS1 patient. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

Figure S6. FD-OCT images at the corresponding vertical locations in the retina in the left eye of the MS2 patient. Each box represents the location where the AO-flood *en face* images were acquired. Scale bar = 0.5 mm. T: temporal, N: nasal, S: superior, I: inferior, R: retina.

Figure S7. The HVF results from 3 months after the initial testing for patient MS1. SITA standard central 24-2 threshold test was used. The mean deviation (MD) was improved to -2.60 dB (within normal limits) 3 months later.

Figure S8. The HVF results from 8 months after the initial testing for patient MS2. SITA standard central 24-2 threshold test was used. The MD was improved to - 0.44 dB (within normal limits) 8 months later.

(a)



(b)

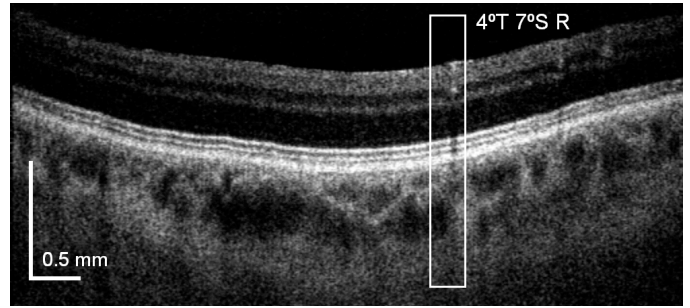
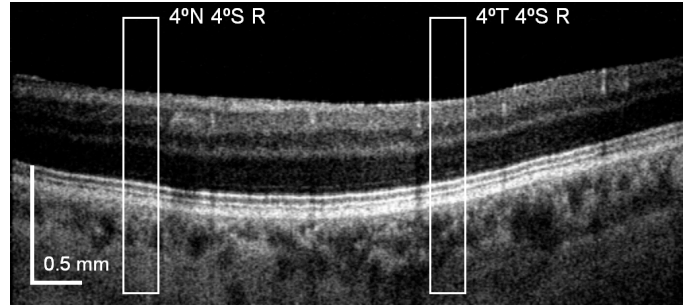
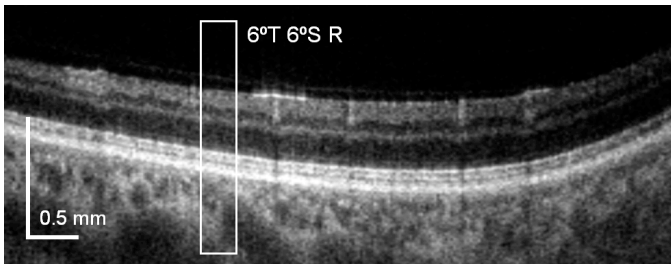
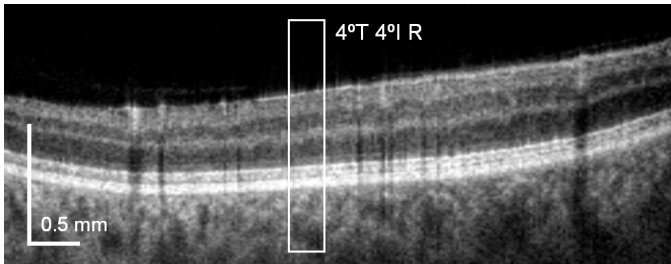
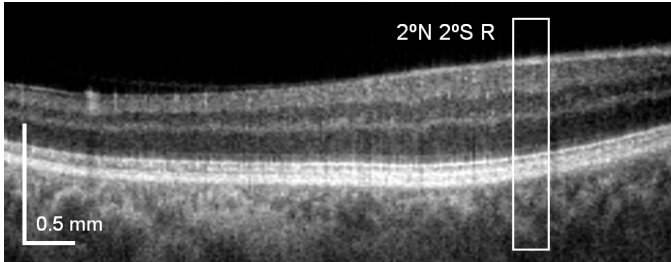


Figure S1

(a)



(b)

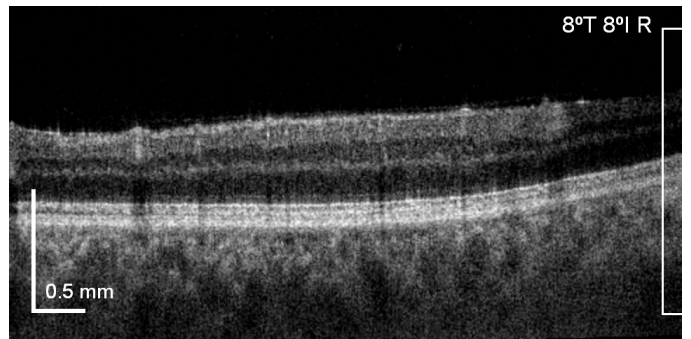
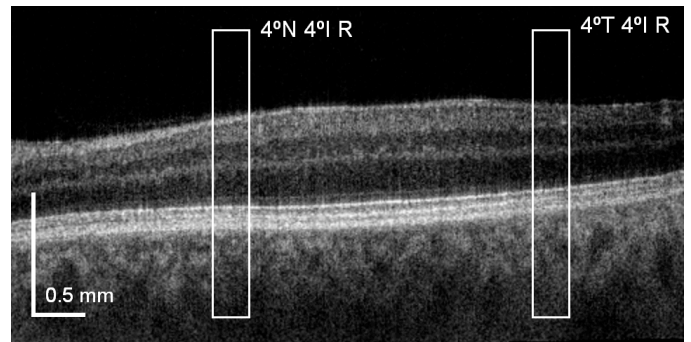
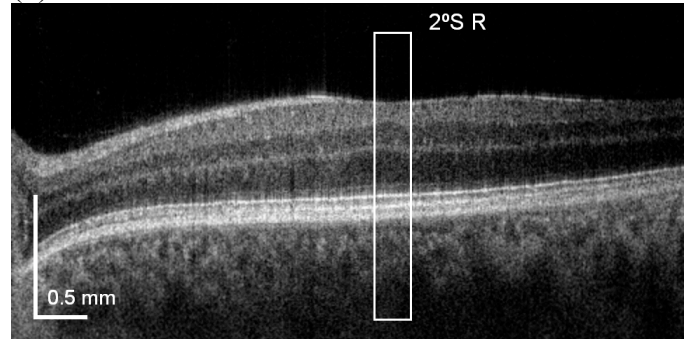


Figure S2

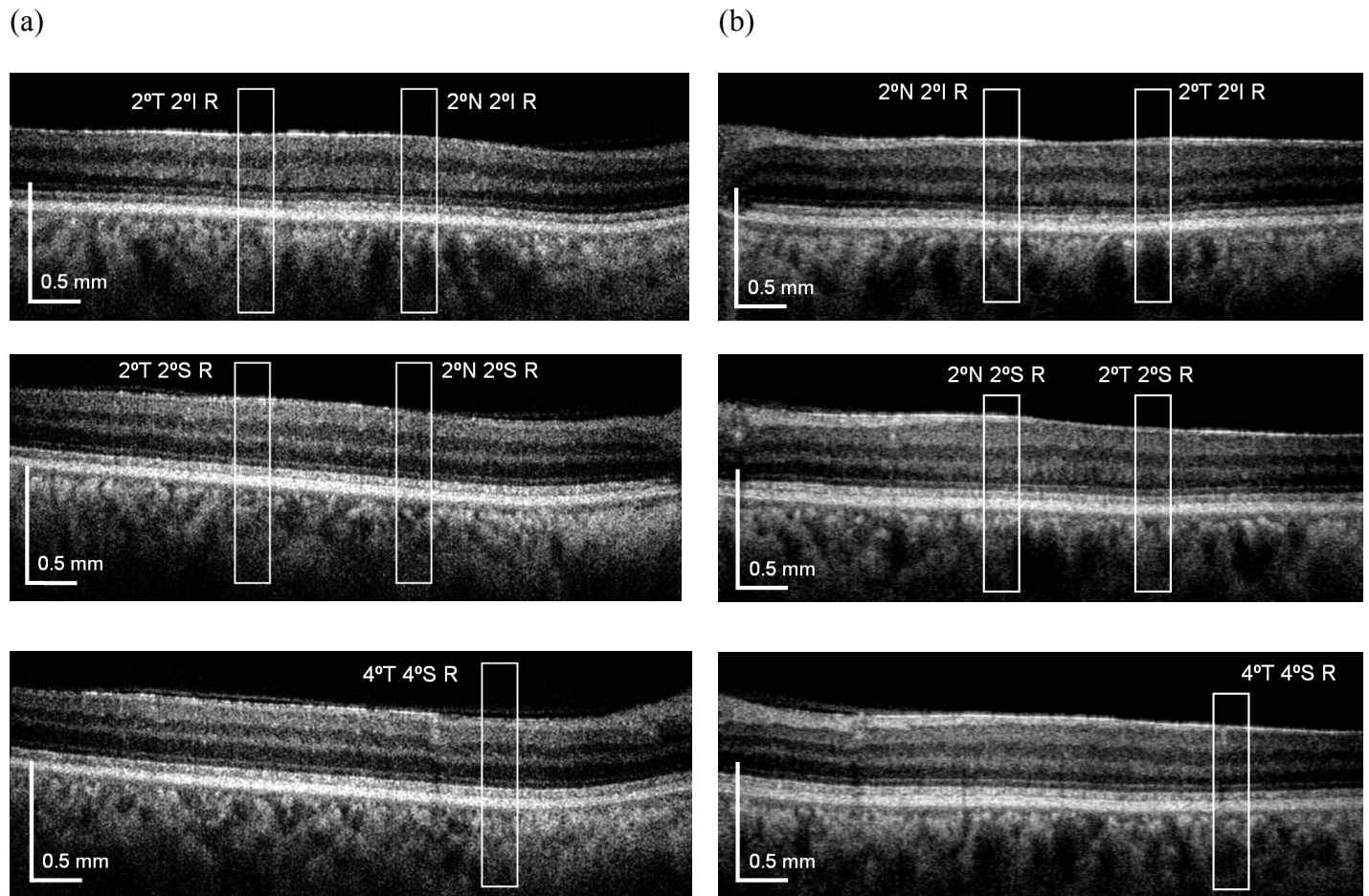


Figure S3

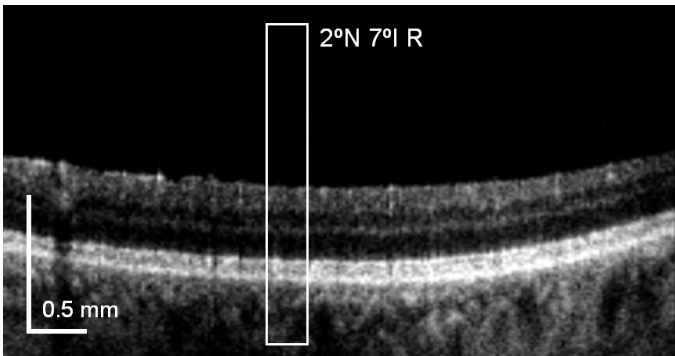
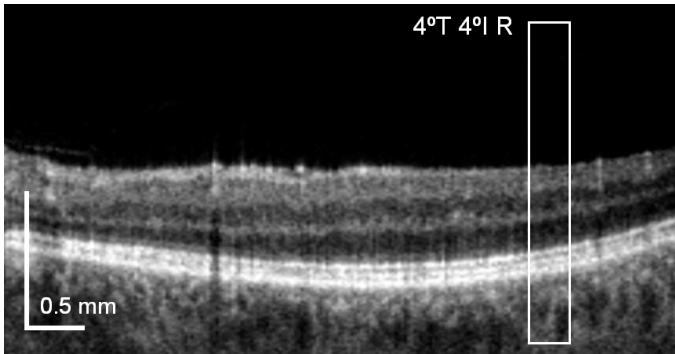
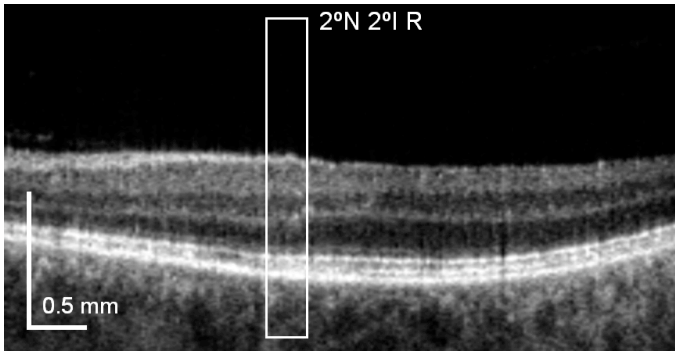
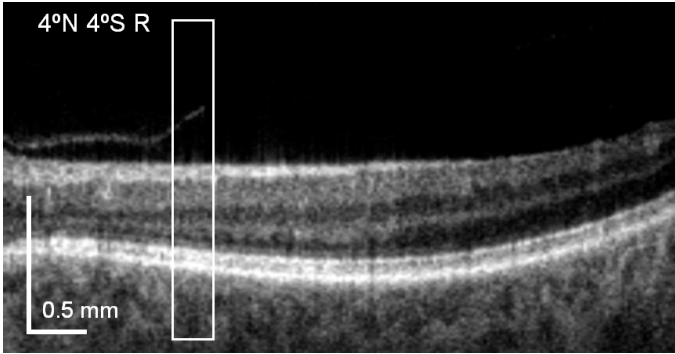


Figure S4

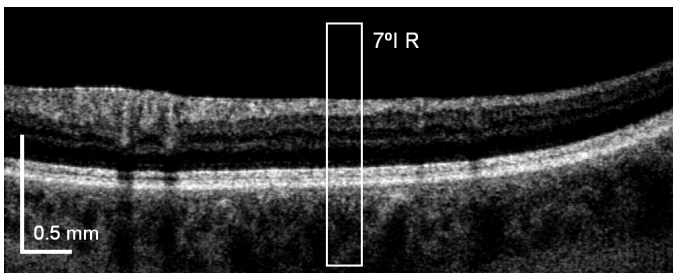
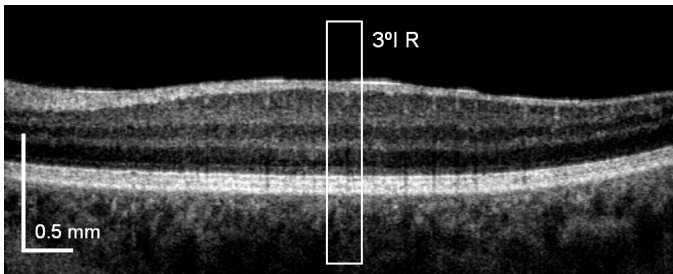
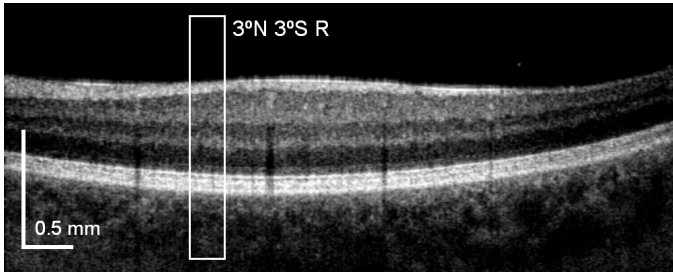
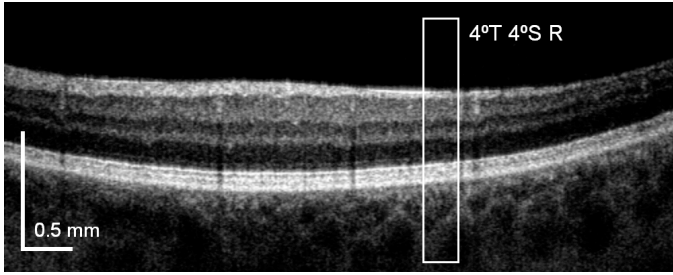


Figure S5

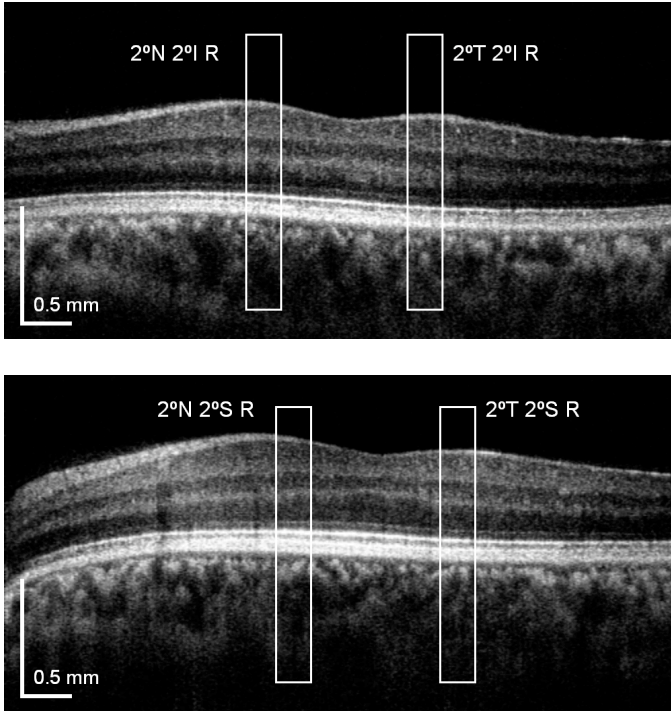


Figure S6

3 months later

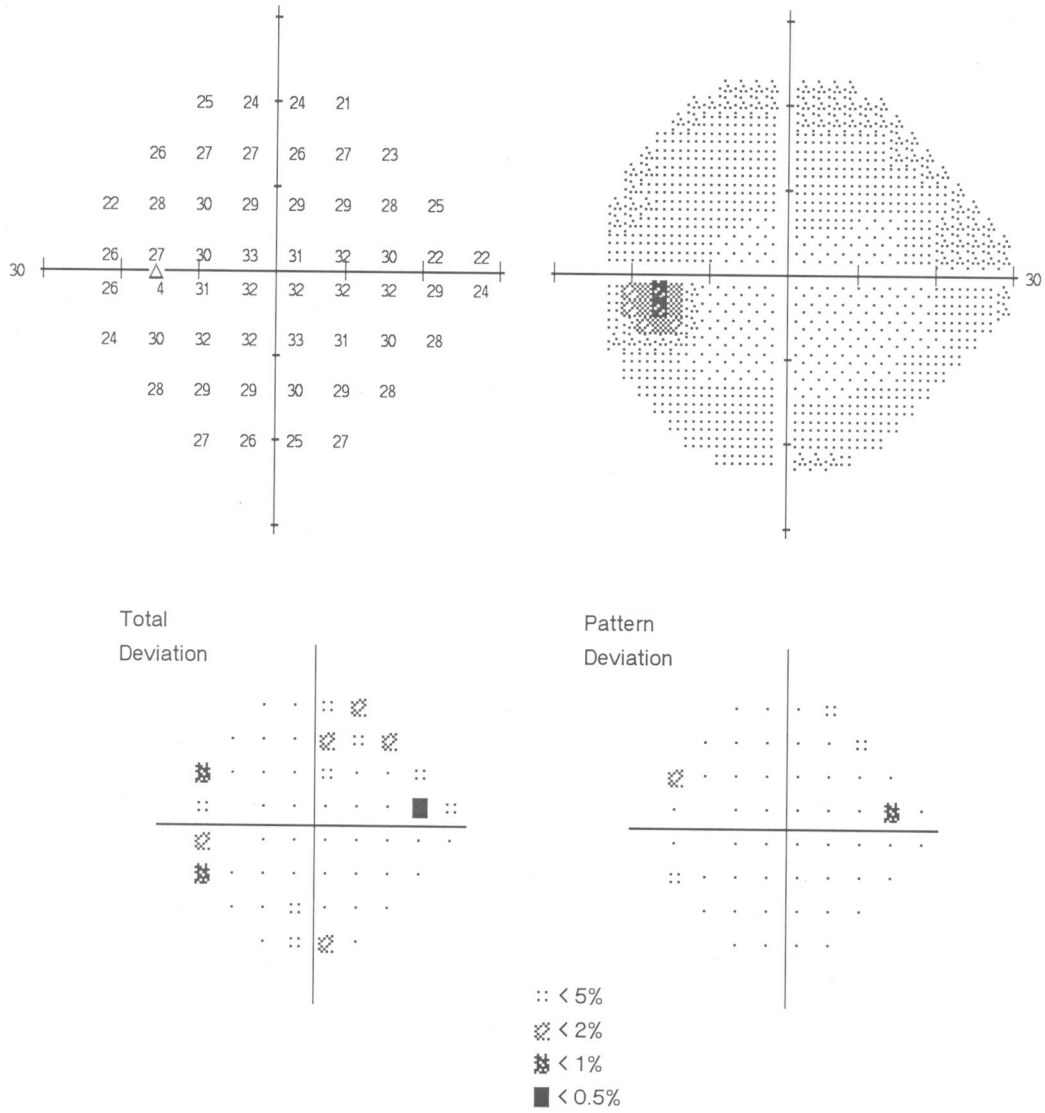


Figure S7

8 months later

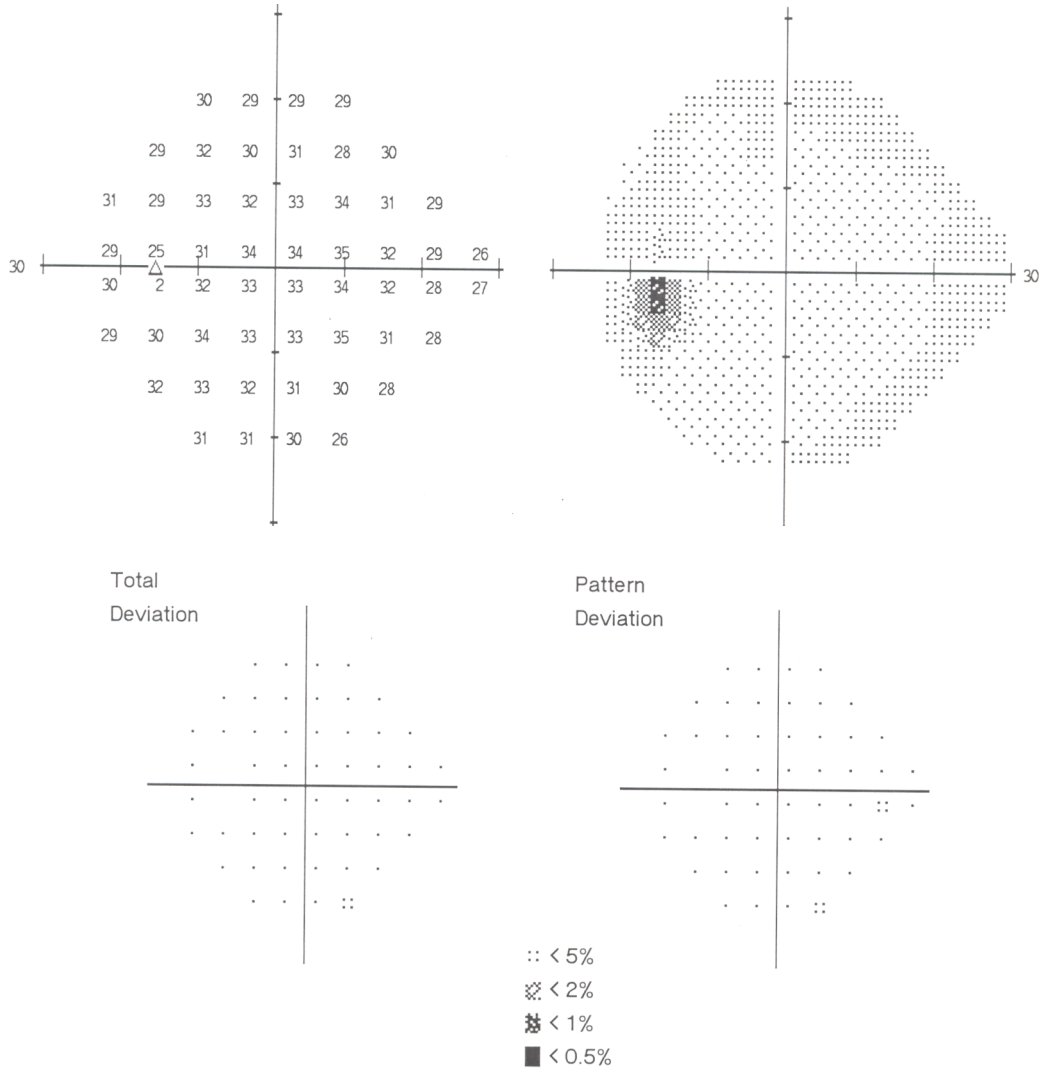


Figure S8