A 12-year-old female individual presented with bilateral vision loss for 2 weeks after 5-month application of repeated low-level red-light (RLRL) laser exposure (Eyerising [Suzhou Xuanjia Optoelectronics Technology]) for bilateral moderate myopia. One month before her presentation, the patient complained of abnormally bright light and prolonged afterimages after exposure to light. Optical coherence tomography (OCT) images before RLRL therapy were normal. The best-corrected visual acuity declined from 20/20 to 20/30 OU. No inflammation was noted in the anterior or posterior segment. Fundus photographs revealed only bilaterally darkened foveae with a hypoautofluorescent plaque in autofluorescence images (Figure 1A and B). OCT identified bilateral foveal ellipsoid zone disruption and interdigitation zone discontinuity (Figure 2A and B). Magnetic resonance imaging showed no positive optic nerve or central nervous system lesions. The infectious and inflammatory workup was negative. Multifocal electroretinogram revealed moderately and mildly decreased response in the macula and paramacula, respectively (Figure 1C and D). After 3 months without RLRL therapy, the bilateral outer retinal damage partially recovered (Figure 2C and D), and the visual acuity improved to 20/25 OU.