

**Dissecting Birdshot Chorioretinopathy with Visual  
Electrophysiology and Multimodal  
Imaging: Detecting Disease Evolution and Drug Treatment  
Efficacy Through Sequential  
ERG Monitoring and Retinotopic Mapping of Macular Function  
and Structure**

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There are now many new methods of imaging the eye which allow eye doctors to analyze different structures and eye functions with greater details. These include electroretinography (ERG), which can measure the reaction to light of the entire retina (full-field ERG) or multiple small sections of the retina (multifocal ERG), and optical coherence tomography (OCT) which can allow doctors to look at all the layers of the retina and the blood vessels of the retina with OCT-angiography.

Because Birdshot chorioretinopathy is a rare disease, not many studies have looked at how these new technologies can be best used to monitor and manage this disease. We want to study how ERG and OCT can be used to detect early signs of Birdshot chorioretinopathy. This could allow doctors to initiate treatment earlier and better monitor treatment response to limit damages. We want to compare these new technologies with existing tests that are already used routinely, like visual field testing, fluorescein angiography, indocyanine green angiography, and fundus autofluorescence. This could also help doctors understand whether and how these tests are associated with vision and symptoms. We also want to study how the disease evolves using ERG and OCT. This may help to detect treatment efficacy more accurately and disease progression before this has an impact on the vision or quality of life of patients.

We follow one of the largest groups of patients with Birdshot chorioretinopathy and currently apply these new imaging technologies

hoping to make faster diagnoses, better adjust treatments, and improve the quality of life of Birdshot chorioretinopathy patients everywhere.