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Short Communication

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# Anti-retina antibody specificity for air

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### DESCRIPTION

The purpose of this study was to look into the relationship between the severity of photoreceptor damage and the level of anti-retina antibodies in the aqueous humour of macular edoema patients, including recovering CA II and enolase-IqG antibodies. Aqueous humour samples were collected from patients with macular edoema and cataracts. The patients were divided into three groups based on the severity of the ellipsoid zone discontinuity seen on optical coherence tomography imaging: cataract patients with intact EZ, macular edoema patients with mild EZ damage, and macular edoema patients with severe EZ damage (Ratschan, 2014). The enzyme-linked immunosorbent assay was used to determine the level of ARAs. The relationship between ARA photoreceptor damage levels and was investigated (Heemels et al, 2009). The intact EZ group had significantly lower ARA levels than the severely damaged group. The intact EZ group had significantly lower levels of recovering IgG than the mildly damaged group. In a subgroup analysis, the level of recovering IgG in DME patients was correlated with their central retinal thicknesscantly lower levels of recovering IgG than the mildly damaged group. In a subgroup analysis, the level of recovering IgG in DME patients was correlated with their central retinal thickness (Dias et al, 2006). The level of ARAs in patients with DME and RVO-aqueous ME's humour was found to be related to the degree of photoreceptor damage (Drees et al, 2005). Antiretina autoantibodies are a type of autoantibody that binds to retinal proteins only. ARAs is frequently used to diagnose autoimmune retinopathies, which are characterized by rapid, Progressive outer retinal damage and visual function impairment.

The specificity of ARAs for AIR, however, had not yet been determined. ARAs have been found in a variety of non-AIR conditions in recent years, including uveitis, retinitis pigmentosa, agerelated macular degeneration, central serous chorioretinopathy, diabetic retinopathy, and macular telangiectasia type 2 (Durrani, 1995). Fumararase antibody titers in the blood of diabetic macular edoema patients at baseline have been linked to photoreceptor damage and poor response to anti-VEGF treatment. Another ARA, anti-hexokinase 1 IgG in the blood, has been found to be higher in diabetic macular edoema patients than in DR patients without DME. It is still unclear whether the presence of ARAs causes or results from these diseases. When the blood-retina barrier is disrupted, ARA in the blood can leak into the extravascular space and cause neuroinflammation, resulting in photoreceptor damage.

## CONCLUSION

Photoreceptor damage may then result in increased retinal antigen release and ARA production, creating a vicious circle between ARAs and photoreceptor damage. The relationship between ARAs and many eve diseases or systemic diseases, particularly autoimmune diseases, was still unknown. The purpose of this study is to look into the relationship between the severitv of photoreceptor damage and the level of ARAs in aqueous humour, such as recovering CA II and enolase-IgG antibodies. This study included 50 patients with macular edoema, 21 of whom were male and 29 of whom were female, with an average age of 57.40 15.09 years.

There was mild EZ damage in 19 eyes and severe EZ damage in 31 eyes. The intact EZ group included 30 cataract patients with intact macular, nine of whom were male and 21 of whom were female, with an average age of 71.87 +/- 9.59 years. The demographic characteristics of all 80 patients enrolled were similar.

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