

IL-18 attenuates experimental choroidal neovascularization as a potential therapy for wet age-related macular degeneration. *Sci Transl Med* 6, 230ra44 (2014)

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Background

Age-related macular degeneration (AMD) is related to chronic stress and oxidation and is considered as one of the leading cause for blindness. It generally develops into two forms wet AMD and Dry AMD. Vascularisation is considered as a primary contributor for Wet form of AMD. However in light of early studies¹⁻⁴ authors have tried to explore the antiangiogenic properties of IL-8 which has proven more effective than antibody based current treatment like VEGF.

Methodology

The study has been carried out in cell culture to check the biological activity of IL-18. The FACS and IHC have been done to estimate the expression of different bio molecules after induction with IL-18 to ARPE-19 cell lines. To validate the study, the knockout mice have (Nlrp3^{-/-}) taken to evaluate the role of IL-18 in controlling of choroidal neovascularization.

Implication

The use of IL-18 in the treatment of CNV secondary to wet AMD holds immense potential therapeutic value for wet AMD patients

as evidenced by the antiangiogenic potency of IL-18 that have shown effective alone and more effective when used with VEGF therapy.

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