

## The interleukin-1 family in pathogenesis of proliferative diabetic retinopathy and traumatic vitreoretinopathy

Author: A. Sergienko, E. Leus, E. Kornilina, Eye Microsurgery Center, Kiev, Ukraine

### Purpose:

To evaluate an influence of IL-1 family: IL-1a, IL-1b, receptor IL-1R2, antagonist IL-1ra in pathogenesis of the vitreoretinal proliferation.

### Methods:

15 patients with DPR and 14 patients with traumatic proliferation (TR) were including in the study. Intraoperatively the subretinal fluid, vitreous and blood were taking up for testing. The measuring of IL-1 family components was performed by ELISA method.

### Results:

Level of IL-1 b was low in subretinal fluid, vitreous and blood of all patients. A content of antagonist IL-1ra was significantly increased in subretinal fluid in patients suffering from TR. It was found a high level of IL-1a in blood of all patients and in the subretinal fluid of eyes with TR. A content of receptor IL-1R2 appeared to be high in all substances except vitreous of patients suffering from DPR.

### Conclusion:

The revealed misbalance between antagonist IL-1ra and IL-1 b may be considered as a cause of development of chronic proliferate process in the posterior segment of eye.

