

Evaluation of Relationship Between VEGF Levels and Age Related Macular Degeneration

K.V. Chalam, MD, PhD (Jacksonville, FL), Shailesh Kumar Gupta, MD (Jacksonville, FL), Sandeep Grover, MD (Jacksonville, FL), Swati Agarwal, MD (Jacksonville, FL)

PURPOSE

Evaluation of Relationship between VEGF levels and Age Related Macular Degeneration.

METHODS

27 aqueous humors samples were collected at multiple sessions from 19 eyes of 19 patients with choroidal neovascular membranes (CNV), secondary to age related macular degeneration. Levels of VEGF were determined by commercially available Human VEGF Sandwich ELISA Kit. 10 aqueous samples collected from 10 patients who underwent cataract surgery served as the controls.

RESULTS

27 aqueous samples were collected from the eyes of 19 patients. There were 13 females and 6 males. The mean age was 76.63 years (range 52-88 years). The VEGF levels in the aqueous humor of patients with choroidal neovascular membrane was $467.9 + 101.9$ (mean + SD) pg/ml (range 335.2-670.5) was substantially higher ($p < 0.01$) than the VEGF level in the aqueous samples from the control group ($108.3 + 72.3$ pg/ml).

CONCLUSION

Aqueous humor contained increase VEGF levels in eyes with choroidal neovascular membrane and represents active angiogenesis at the time of presentation.