THE ROLE OF MORPHOLOGICAL CHARACTERISTICS OF "SHRM" ON THE REGULATION OF n-ARMD ACTIVITY AND THE RESPONSE TO ANTI-VEGF TREATMENT

Jana Nivichka Kjaeva, Milena Golubovic, Vesna Dimovska Jordanova, Vesna Cheleva Markovska, Natasha Trpeska Shekerinov, Andrijana Petrushevska

Medical Retina, University Clinic for Eye Disease Skopje, North Macedonia, Republic of North Macedonia

Antivascular growth factor (anti-VEGF) therapy in neovascular age-related macular degeneration is currently the standard of care for the treatment and the maintenance of visual acuity in wet age-related macular degeneration. Morphological changes such as sub-retinal fluid (SRF), intra-retinal fluid (IRF), fluid under the retinal pigment epithelium (PED) and hyper-reflective material (HRM) are actually anatomical biomarkers that are a quantitative marker for the course, the outcome of the disease and the response to anti-VEGF treatment.

PURPOSE

The influence of different types of HRM on the stability of the disease evaluated through the fluctuation of morphological markers and the frequency of interval drug applications.

MATERIALS AND METHODS

The study is a prospective interventional study done at the University Clinic for Optahlamology in Skopje, North Macedonia in patients with neovascular form of AMD treated in the period between 2021-2022.

RESULTS AND CONCLUSION

The small sample size of the studies showed that in both groups stagnation or improvement was seen in patients with small changes in the fluid volume and HRM after three loading doses of the drug. The stability of the fluid or the presence and reduction of the fluid produced reduced values of central foveal macula thickness and improvement of the architecture of the layers and establishment of the integrity of the ellipsoid zone.

The findings suggest that the instability of disease activity is detrimental to optical anatomic outcome.

Key words: anti-VEGF therapy, anatomical predictors, morphological and functional outcome of treatment.