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Evaluation of the efficacy of micronutrition therapy in patients with neovascular AMD who could not perform intravitreal therapy during the COVID pandemic period.

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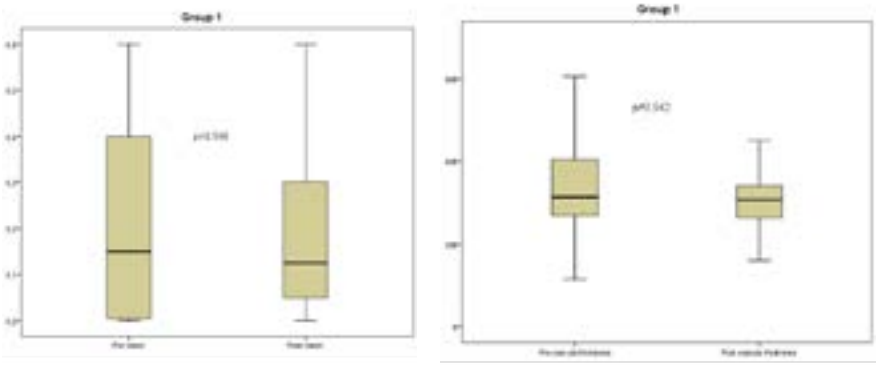
Purpose In this study our aim is to investigate the effectiveness of micronutrition therapy in patients with neovascular type AMD who cannot undergo intravitreal therapy during the pandemic period.

Material-Method: The files of patients with neovascular Age-related macular degeneration (nAMD) who could not receive intravitreal treatment between March 2020 and July 2021 were reviewed retrospectively. Two groups were formed from patients who met the inclusion criteria. Patients who received regular micronutrition therapy for at least 6 months were included in Group-1, and patients who did not receive regular micronutrition therapy in Group-2. Age, gender, duration of nAMD, treatments applied, duration of follow-up, intraocular pressure (IOP), best corrected visual acuity (BCVA), central macular thickness (CMT), type of micronutrition used and duration of use were recorded and data were created. The obtained data were compared between the two groups. Primarily, the change between BCVA and CMT between the two groups was evaluated.

Result: Of the 183 nAMD patients whose data were scanned, 125 were excluded because of missing data or using irregular micronutrition. Of the 58 patients who met the inclusion criteria, 27 were included in Group-1 and 31 in Group-2. BCVA and CMT values of the groups at the beginning of the pandemic are 0.69±0.72, 0.88±0.82, respectively (p=0.074); 333.6±102, 385.3±92.6 (p=0.074). BCVA and CMT values of the groups in the first examination after the pandemic were 0.74±0.76, 1.39±1.30 (p<0.001); 327.9±140.5, 399.9±152.7 (p=0.062) respectively.

Coclusion: As a result, it was observed that micronutrition treatment did not make a significant difference between the groups in terms of CMT, but we determined that it slowed the poor prognosis in terms of BCVA. We believe that micronutrition therapy may be a supportive treatment for intravitreal therapy in patients with nAMD. These findings highlight the importance of micronutrition intake for nAMD patients applying for treatment.



Recent Publications:

1. Chong EW, Wong TY, Kreis AJ, et al. Dietary antioxidant and primary prevention of age-related macular degeneration: systemic review and meta-analysis.BMJ 2007;335(7623):775
2. Querques G, Benlian P, Chanu B, et al. Nutritional AMD Treatment Phase I (NAT-1): Feasibility of Oral DHA Supplementation in Age-Related Macular Degeneration. European Journal of Ophthalmology. 2009;19(1):100-106.
3. Souied EH, Delcourt C, Querques G, Bassols A, Merle B, Zourdani A, et al. Nutritional AMD Treatment 2 Study Group. Oral docosahexaenoic acid in the prevention of exudative age-related macular degeneration: The Nutritional AMD Treatment 2 study. Ophthalmology. 2013; 120(8): 1619-31.
4. Dharamdasani Detaram H, Mitchell P, Russell J, Burlutsky G, Liew G, Gopinath B. Dietary zinc intake is associated with macular fluid in neovascular age-related macular degeneration. Clin Exp Ophthalmol. 2020 Jan;48(1):61-68.
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Biography

Erdinç Bozkurt tries to focus on retinal diseases such as macular posterior pole degenerations. He works hard to improve the diagnosis and treatment of these diseases. It has goals such as improving the well-being and prognosis of their diseases, especially in patients followed in the retina unit.