Poster Abstracts

SP.607
Scotoma Size and Reading Speed in Patients with Occult Choroidal Neovascularization in Age-Related Macular Degeneration
*Erdem Ergun1, Noemi Maar1, Wolfgang Radner1, Irene Barbazetto2, Ursula Schmidt-Erfurth2, Michael Stur1
1. Dept. of Ophthalmology, Univ. of Vienna
2. Klinik fuer Augenheilkunde, Medizinische Universitaet Lübeck

Purpose: To examine the influence of scotoma size in occult choroidal neovascularization on reading speed and reading acuity. Patients&Methods: 23 patients with age-related macular degeneration and occult CNV were examined using ETDRS charts and a new, standardized German-language reading test (Radner® reading charts) which allows performance-based testing in the form of reading speed and redaing acuity. Scotoma size was measured using the scotometry programme (2.01) of the Rodenstock® Scanning Laser Ophthalmoscope. The areas of both absolute and relative scotoma were measured. Results: A significant correlation was seen between the size of the absolute scotoma and reading speed (p=0.023). Furthermore, reading capacity (expressed as logRAD) and absolzute scotoma size correlated significantly.Relative scotma size did not correate with reading speed or reading capacity. Conclusion: Absolute scotoma size influences reading acuity and reading speed significantly. Relative scotoma size has no influence, this probably being due to excentric fixation by the patients.

SP.608
Photodynamic Therapy with Indocyanine Green for Subfoveal Choroidal Neovascularization in Age Related Macular Degeneration
*M.E. Farah, R.A. Costa, J.A. Cardillo, R. Belfort Jr
Department of Ophthalmology, Federal University of Sao Paulo, Paulista School of Medicine, Sao Paulo, SP, BRAZIL

Purpose: To report a case of occult subfoveal choroidal neovascularization due to age-related macular degeneration that was successfully treated with photodynamic therapy using indocyanine green and 810 nm light irradiation (i-PDT). Methods: Case report. An 82-year-old patient with occult subfoveal choroidal neovascularization (one eye) due to age-related macular degeneration was treated with i-PDT and was prospectively followed with fluorescein and indocyanine green angiography as well as optical coherence tomography.
Results: A complete regression of the choroidal neovascularization was achieved within one week following treatment. Visual acuity improved from 20/400 to 20/160 by two months of follow-up. Optical coherence tomography revealed diminishing of the subretinal fluid. There were no complications related to the procedure.
Conclusion: i-PDT is a novel and low-cost treatment that successfully induced choroidal neovascularization regression by means of non-thermal reactions, thereby sparing the neurosensory retina and facilitating recovery of visual function.

SP.609
Macular Retinal Circulation in Atrophic Age-Related Macular Degeneration
*Seiyo Harino1, Yukiko Sonomura2, Yoshiko Iwahashi1, Kuniko Kitanishi3
1. Department of Ophthalmology, Yodogawa Christian Hospital
2. Department of Ophthalmology,Osaka Nakatsu Saiseikai Hospital
3. Department of Ophthalmology,Izumiotsu Municipal Hospital

Purpose: To investigate a change in macular retinal circulation in atrophic macular degeneration. Methods: Macular circulation in retinal capillaries was measured by using blue field entoptic simulation technique (Oculix BFS-2000) in 19 patients (18 male, 1 female ranging in age 47-76) who had unilateral atrophic macular degeneration. Velocity (V) and Density (D) of white blood cells were determined in both diseased and normal fellow eyes. Result: V, D and VxD were 0.75 +/- 0.24 and 0.65 +/- 0.19 mm/s, 100.3 +/- 52.9 and 71.2 +/- 52.8 particles per field, 76.1 +/- 47.6 and 48.7 +/- 43.6, respectively. Both the D and VxD were significantly lower in the diseased eye than those in its fellow eye ($p<0.05$, Mann-Whitney U). Macular retinal circulation was not correlated with the best corrected visual acuity nor with parameters of the electroretinogram in this disease. Conclusion: It has been reported that choroidal blood flow is diminished. In addition, a decrease in the retinal capillary blood flow may be noted in the diseased eye in comparison with the fellow eye in atrophic age-related macular degeneration patients.

SP.610
Comparing Results Between The Patients with Choroidal Neovascularization(CNV) In Age Related Macular Degeneration(AMD) Who Had No Treatment To Those Who Underwent Laser Photocoagulation (LPC)
*Tatjana Josifova1, Milica Ivanovska1, Karolina Blazevska1, Vesna Celeva1, Jovanka Ristova2
1. University Ophthalmology Clinic - Skopje, Macedonia
2. Ophthalmology Health Institute - Stip, Macedonia
The aim of this study is to show whether the patients with CNV in cases of AMD who underwent a LPC have a benefitial effect compared to the patients who have a natural history of the disease.

Materials and Methods: In the period of 1997-1998 a clinical and fluorescein angiographical investigation was made in order to determinate the CNV in cases with AMD. A subgroup of 64 patients with extrafoveolar and juxtafoveolar AMD, who had initial lesion that ranged between 1 and 3 MPS disc areas was included in the study. The visual acuity(VA) ranged between finger counting and 20/100.
29 patients underwent Argon Laser Photocoagulation versus 35 who had no treatment. The follow-up period was 24 months, with monitoring of the patients every three months. Results: Persistent CNV was seen in 11/29 (37,9%) patients, and recurrent CNV occured in 14/29 (48,2%) in the treated eyes within the follow-up period. The VA in the treated group showed that the baseline VA was maintained in 8/29 (27,5%), versus the non-treated group with 17/35 (20,5%) patients. Improvement of the VA in the treated group was seen in 4/29 (13,7%), compared to non-treated group 2/35 (5,7%). From the whole number of treated patients who had visual loss, a severe visual loss was seen in 7/17 (41,1%), while the number of the patients with severe visual loss in the non-treated group was 8/16 (50%).
Conclusion: Haveing no big differences between the treated and non-treated group with CNV in AMD, LPC is an alternative but not a satisfactory method in the treatment of these patients.