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## Assessment of Environmental AMD Risk Factors in a Population of Patients Suffering From Stroke and Myocardial Infarction

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### Abstract

**Purpose:** Stroke and myocardial infarction are common diseases occurring in patients suffering from Age Macular Degeneration (AMD). We assessed the rate of AMD and AMD risk factors in patients suffering from recent stroke or myocardial infarction.

**Methods:** Patients suffering from a recent stroke or myocardial infarction (less than 1 month) benefited from a thorough ophthalmic examination with the following measurements and evaluations: visual acuity, intraocular pressure, fundus photography, Raman spectroscopy and macular OCT. In the same time a food questionnaire was dispensed. Finally, blood samples to measure fatty acids and lutein were performed.

**Results:** 74 patients were examined, 31 females and 43 males. The age of the patients was  $65 \pm 10$  years, [47-90]. The rates of stage 2 and 3 AMD were 25.7 % and 13.5 % respectively (n=19, n=10). Raman spectroscopy did not differ between groups,  $p=0.83$ . Central retina thickness was increased in the AMD group,  $250 \pm 37 \mu$  versus  $222 \pm 35 \mu$ ,  $p=0.04$ . The fatty acid profile and lutein in blood did not differ between patients with or without AMD,  $p=0.7$  and  $p=0.21$ , respectively. The overall omega 6/ omega 3 ratio was  $4.64 \pm 0.97$  in our population.

**Conclusions:** The rate of AMD risk factors does not seem to be increased in the patients suffering from AMD in this population of patients suffering from stroke and myocardial infarction. A longitudinal study is needed to confirm these results.

**Keywords:** age-related macular degeneration • nutritional factors • clinical (human) or epidemiologic studies: risk factor assessment

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