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Letters to the Editor

Visual outcomes in relation to time to treatment in neovascular age-related macular degeneration

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Editor,

The article by Rasmussen et al. (2015) established that visual outcome improved markedly with earlier injections in their study group of patients treated with anti-angiogenics drugs for neovascular age-related macular degeneration (nAMD). The improvement in visual outcome was the equivalent of five Early Treatment Diabetic Retinopathy Study protocol (ETDRS) letters for a shortening of a median delay from 2 weeks in the first cohort (2007) to 1 day in the last cohort (2012) spread over a 6-year period, despite unchanged age and baseline best corrected visual acuity (BCVA). The authors explanation about the findings were that the five ETDRS letters gained in their cohorts by injecting on the day of diagnosis rather than 2 weeks later exceed the effect of the longer untreated period, and it suggests that the response characteristics of the choridal neovascularization (CNV) lesion may change within the first weeks after diagnosis. We published a study recently where we explored decline in visual acuity in patients with (nAMD) awaiting intravitreal bevacizumab or ranibizumab treatment following initial diagnosis and after disease reactivation (Real et al. 2014). In the study, we stated that early treatment of nAMD is critical to achieve best clinical outcomes. We provide correlation between delay to both initial anti-vascular endothelial growth factor (VEGF) treatment and retreatment (associated with administrative decisions and/or reasons intrinsic to the patient) with deterioration of vision over time. We also found a nonlinear decline in such vision loss. There is an initial rapid loss of vision in the early period of disease followed by a slowing in the velocity of visual loss. The polynomial equations obtained in the study predicted a loss of one logMAR line (five letters) in <3 weeks. In contrast, Muether et al. (2011) and Wong et al. (2008) both reported such decline at 3 months. The explanation to Rasmussen et al. (2015) results could be because refraction and visual acuity assessment was not repeated between the baseline examination and the initial injection the patients in the first cohort having a deterioration of the visual acuity during the time they wait for the intravitreal injection. In the first cohort, patients lost at least five letters and as we learned, the recovery of visual acuity is always less than the loss of that vision between the diagnosis of the disease and intravitreal anti-angiogenic. In other words, after treatment with anti-VEGF, it is very difficult to recover 100% of visual acuity lost until diagnosis as demonstrated Holz et al. (2011). So, the patients' visual acuity lost during the 16-day period between diagnosis and treatment probably was only partially recovered after loading doses in the 2007 group of patients contrary to the 2012 cohort that they were immediately injected after diagnosis. So, we agreed with the authors as nAMD is a time critical disorder every day that treatment is delayed counts, whether by delay in diagnosis or impediment in access to intravitreal medication. Once either matter is detected, treatment with intravitreal anti-VEGF should be considered as a matter of clinical urgency. We also congratulate the authors to bring to our attention the importance of the time to treatment in nAMD.

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Home- or self-tonometry to the follow-up of intraocular pressure in glaucoma

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Editor,

Today, patients with arterial hypertension or diabetes mellitus are controlling their health parameters at home. Elevated intraocular pressure (IOP) is one of the major risk factors of glaucoma and the only one which can be treated. On patients with glaucoma, IOP is measured by health personnel usually two to four times a year. The real problem is the diurnal variation of IOP which is not known by a single measurement. In 2014, in Finland there were 87 500 patients with chronic glaucoma (1.6% of the