

Ranibizumab for retinal angiomaticous proliferation

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Dear Editor,

We read with great interest the article by Konstantinidis et al. [1] on the efficacy of intravitreal ranibizumab in patients with retinal angiomaticous proliferation (RAP). They reported favorable results in a series of 31 patients, with statistically significant improvement of the visual acuity by a mean of 2.7 lines after receiving five injections on average over a mean follow-up period of 13.4 months. We have previously published our data on ranibizumab [2] in patients with RAP in a randomized prospective open-label study comparing intravitreal ranibizumab, intravitreal ranibizumab with PDT and intravitreal triamcinolone (IVT) with PDT. In our study, we found no statistically significant differences in the VA of 13 patients treated with an average of 5.92 injections of ranibizumab over a mean period of 8.38 months, while there was a trend towards better VA at the end of the follow-up in the IVT & PDT group.

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Konstantinidis et al. tried to explain the different results of the two studies, commenting on the different percentage of PED between the two studies (35% [1] vs 61.5% [2]) and raising concerns about missed treatments in our study due to undetectable changes on the OCT in patients with PED. We agree that when OCT alone is used to dictate treatment in cases of RAP with PED, there is a slight chance of patients having missed treatment. However, we believe that the two studies are not comparable for the following reasons. First, as the authors correctly state, there is a significant difference in the percentage of PED, which has a negative prognostic value in patients with RAP. The presence of PED in RAP represents an advanced stage of the disease with longstanding retinal damage. Second, there is a significant difference in the number of patients with stage III RAP (16% [1] vs 23.1% [2]), a stage that carries a worse prognosis than for the other RAP stages. Third, the authors provide statistical data only for the last follow-up, and not for the previous time-points. One should compare our values at the mean 8.38 months follow-up with their respective time-point values instead of the reported 13.4-month values, in order to draw firm conclusions.

Furthermore, Konstantinidis et al. refers to other previously published studies [3–7] that are in agreement with their study. Only two of these studies report the effects of ranibizumab [3, 6], while the rest refer to bevacizumab, a similar molecule to ranibizumab, but with different kinetics in the eye [8]. The ranibizumab studies are small case series with short follow-up, which is the case also for the bevacizumab studies. Based on the above, it is clear that all the previously mentioned studies (including the one by Konstantinidis et al. and our study) provide a low level of evidence regarding the effectiveness of ranibizumab in RAP. The main advantage of our study is the comparison of three different treatments, with the IVT & PDT group achieving

relatively better results (yet not statistically significant) with a very low mean number of injections (1.63).

We believe that a comparative, multi-center, double-blind study is essential in order to determine the appropriate treatment for RAP, as the already published studies are indicative and not definitive.

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