REAL-WORLD OUTCOMES OF ANTI-VEGF TREATMENT FOR RETINAL VEIN OCCLUSION IN PORTUGAL

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Purpose: We aim to characterize real-world treatment patterns in patients with retinal vein occlusion (RVO) treated with anti-VEGF in Portugal and evaluate the visual acuity and tomographic outcomes.

Setting/Venue: Eight hospitals of the Portuguese National Health Service.

Methods: Retrospective, observational multicenter study of Portuguese patients with center-involving macular edema secondary to RVO (BRVO and CRVO) treated with anti-VEGF as primary treatment and with a follow-up of 12-months. Hemiretinal vein occlusion was analyzed within the BRVO group.

Results: 200 eyes were analyzed, respectively 124 eyes (62%) with BRVO and 76 eyes (38%) with CRVO; 50% of patients were male and the mean age was 69 years-old (33-91). The median visual acuity (VA) gain was maximal at 6 months, respectively -0.2 logMar (2-line gain) and -0.1 logMar (1-line gain) for the BRVO and CRVO groups and was maintained throughout the follow-up (p<0.05 in 0-6 and 0-12 months period in both groups).

The central macular thickness (CMT) decreased from 535 μm to 333 μm at 6 months of follow-up in the BRVO group and from 693.5 μm to 404 μm in the CRVO group. At 12 months no further significant improvement was seen (p<0.05 in 0-6 months period in both groups). The mean change of CMT was not statistically different between both groups in neither time point. The median number of injections was 3 in the first 6 months of follow-up and 1 in the next 6 months in both groups. A better VA outcome was associated with younger age, higher initial VA and a lower baseline CMT in both groups (p<0.05).

Conclusions: Real-world outcomes of anti-VEGF treatment for RVOs are usually worse than the ones obtained in the landmark clinical trials in both functional and morphological parameters. Our results are in accordance with other real-life studies and confirm a better prognosis of BRVO in comparison with CRVO.

This could be due to less intense treatment but also because clinical trials usually exclude patients with poor baseline characteristics.