

Treatment of polypoidal choroidal vasculopathy with intravitreal bevacizumab monotherapy

Sir,

We read with interest the article by Chhablani *et al.*^[1] describing the outcomes of intravitreal bevacizumab monotherapy for treatment-naïve polypoidal choroidal vasculopathy (PCV). While the patients in this series achieved significant improvement in visual acuity during the follow-up period, we feel that it is important for clinicians to consider the range of treatment options available for PCV and their respective merits when managing this condition.

In this article, three of nine eyes were found to have persistence of polypoidal lesion,^[1] with the other six (66.7%) presumably demonstrating regression of polyps. However, the results of other studies assessing the outcomes of both bevacizumab and ranibizumab monotherapy for PCV are not as promising, with polyp regression rates ranging from only 14.3% to 26% being reported.^[2] In the EVEREST study,^[3] a prospective, multicenter randomized controlled trial comparing photodynamic therapy (PDT) either alone or in combination with ranibizumab against ranibizumab monotherapy, the rates of polyp closure at 6 months was 71.4% for the PDT monotherapy group and 77.8% for the group treated with both PDT and ranibizumab. In contrast, the group treated with ranibizumab monotherapy achieved polyp closure in only 28.6% of cases. In another study comparing the outcomes of PCV cases treated with either intravitreal bevacizumab or ranibizumab, the polyp regression rate was similar in both groups at 12 months: 24.2% (16 of 66 eyes) in the bevacizumab group and 23.3% (14 of 60 eyes) in the ranibizumab group.^[2]

Similar to the results in this article,^[1] many of the studies in the literature on monotherapy with either intravitreal

bevacizumab or ranibizumab reported good visual outcomes and improvement in central subfield thickness on optical coherence tomography.^[2] Indeed, in the EVEREST study,^[3] there was no significant difference in either best-corrected visual acuity or retinal thickness among the three treatment groups at the final time point. However, we feel that the rate of polyp closure is an important consideration for ophthalmologists when evaluating and discussing treatment options for PCV. It has been reported that persistent polyps may bleed,^[4] potentially affecting patients' visual acuity. The hemorrhages resulting from PCV lesions range from small subretinal hemorrhages to massive hemorrhages which could, in some cases, result in breakthrough vitreous hemorrhage.^[4,5] Studies on the results of PDT treatment of PCV have reported rates of polyp closure ranging from 73% to 99%.^[2] Therefore, when evaluating the role of PDT in the treatment of PCV, ophthalmologists will need to balance the known side effects of PDT against the potential benefit in terms of better polyp regression. This remains the subject of much discussion and investigation and will continue to be investigated in future randomized controlled trials.

In summary, we congratulate the authors on their good clinical outcomes. Their article contributes to the ongoing discussion on the optimal treatment of PCV, so that our patients achieve the best long-term visual and anatomic outcomes.

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References

- Chhablani JK, Narula R, Narayanan R. Intravitreal bevacizumab monotherapy for treatment-naïve polypoidal choroidal vasculopathy. *Indian J Ophthalmol* 2013;61:136-8.
- Koh AH; Expert PCV Panel, Chen LJ, Chen SJ, Chen Y, Giridhar A, *et al.* Polypoidal choroidal vasculopathy: Evidence-based guidelines for clinical diagnosis and treatment. *Retina* 2013;33:686-716.
- Koh A, Lee WK, Chen LJ, Chen SJ, Hashad Y, Kim H, *et al.* EVEREST study: Efficacy and safety of verteporfin photodynamic therapy in combination with ranibizumab or alone versus ranibizumab monotherapy in patients with symptomatic macular polypoidal choroidal vasculopathy. *Retina* 2012;32:1453-64.
- Lim TH, Laude A, Tan CS. Polypoidal choroidal vasculopathy: An angiographic discussion. *Eye (Lond)* 2010;24:483-90.
- Tan CS, Wong HT, Lim BA, Hee OK, Lim TH. Polypoidal choroidal vasculopathy causing massive suprachoroidal haemorrhage. *Eye (Lond)* 2007;21:132-3.

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