Photodynamic therapy for polypoidal choroidal vasculopathy

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Dear editor,

I read the article by Mori et al [1] with interest. The article reports factors affecting the visual outcome of photodynamic therapy (PDT) for polypoidal choroidal vasculopathy (PCV).

I would like to comment about the disadvantages of PDT in PCV. PDT is associated with several disadvantages. First, PCV often presents as multiple widely distributed lesions, so it might be difficult to treat all lesions, including multiple polyps and interconnecting vessels, with a single beam of PDT. Treatment of leaking polypoidal dilations only, without treating the entire vascular complex, can result in persistence or worsening of exudation. Second, it can be difficult to treat nodules in the peripapillary area with a round PDT beam. Third, features commonly associated with PCV, such as a large pigment epithelium detachment or a large submacular hemorrhage, are not usually amenable to PDT treatment, which were excluded from this study. Fourth, PCV tends to recur repeatedly, so multiple PDT treatments are often necessary, which can increase the risk of long term choroidal atrophy. Cases of massive subretinal/suprachoroidal hemorrhage have been reported soon after PDT [2]. Even 50% reduced light fluence PDT can produce a retinal pigment epithelial tear in pigment epithelial detachment [3].

No financial relationship with the organisation.

I have full control of all primary data, and I agree to allow Graefes' Archive for Clinical and Experimental Ophthalmology to review their data upon request.

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Anti-VEGF (vascular endothelium growth factor) drugs may have a limited role in complete regression of polyps; complete regression of polypoidal lesion on indocyanine green angiography (ICGA) may not be the therapeutic target, but close follow-up is mandatory. Polyps showing the “washout phenomenon” on ICGA can be watched.

Recently, Kokame et al. [4] reported stabilization of vision at 6 months, with monthly intravitreal injection of ranibizumab in PCV. Rudnisky et al. showed no improvement with addition of PDT with anti-VEGF treatment for CNV in age-related macular degeneration [5]. Considering the disadvantages and economic burden associated with PDT, anti-VEGF drugs alone could be the preferred treatment for symptomatic PCV.

References

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