

To stop or not to stop? Sight threatening bilateral panuveitis as side effect of vemurafenib therapy for metastatic colorectal melanoma

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Background

Patients with metastatic melanoma can present a BRAF-gene mutation in 46% of the cases. Vemurafenib is a potent and specific BRAF v600-enzyme inhibitor, and uveitis its most common ocular side-effect. We report the case of a metastatic melanoma patient treated with vemurafenib who experienced a sight-threatening bilateral panuveitis

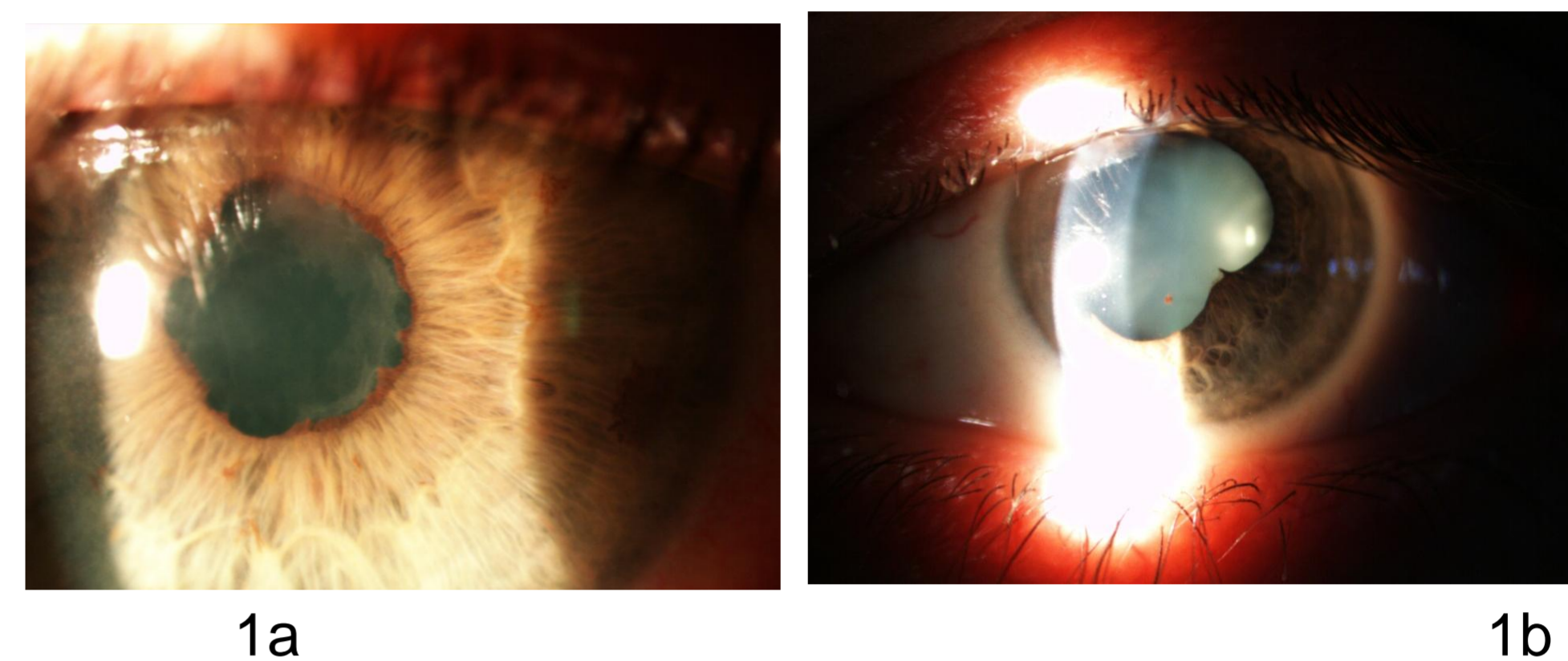


Fig.1a: LE fibrinous pupillary membrane
Fig. 1b: posterior synechiae

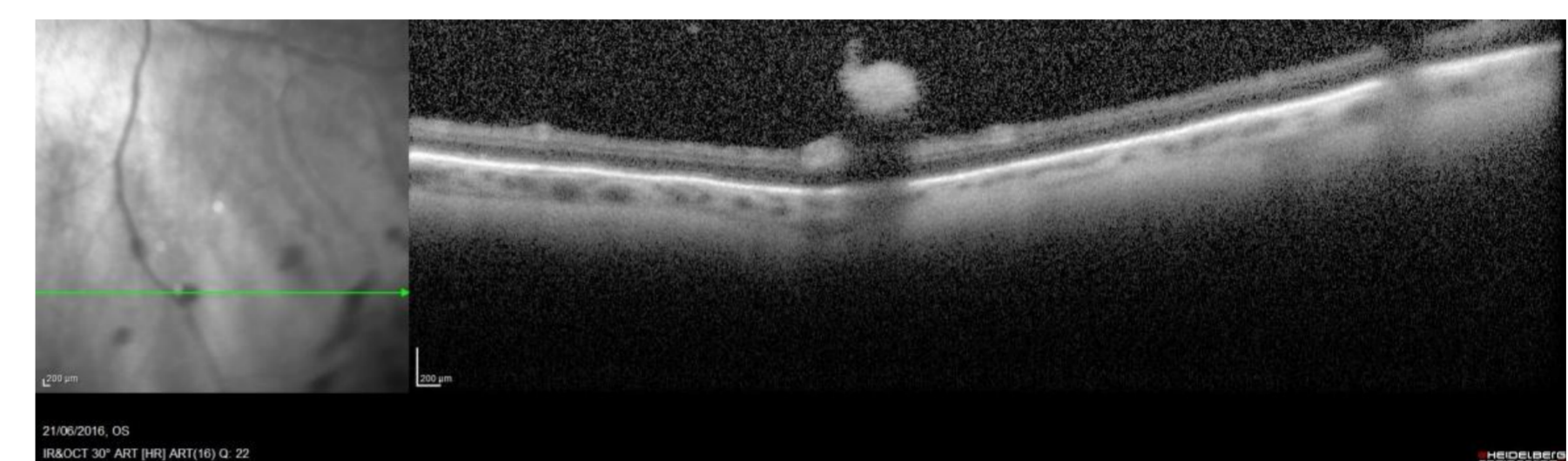


Fig. 2: RE vitreous exudate

Fig. 3: LE optic disc edema

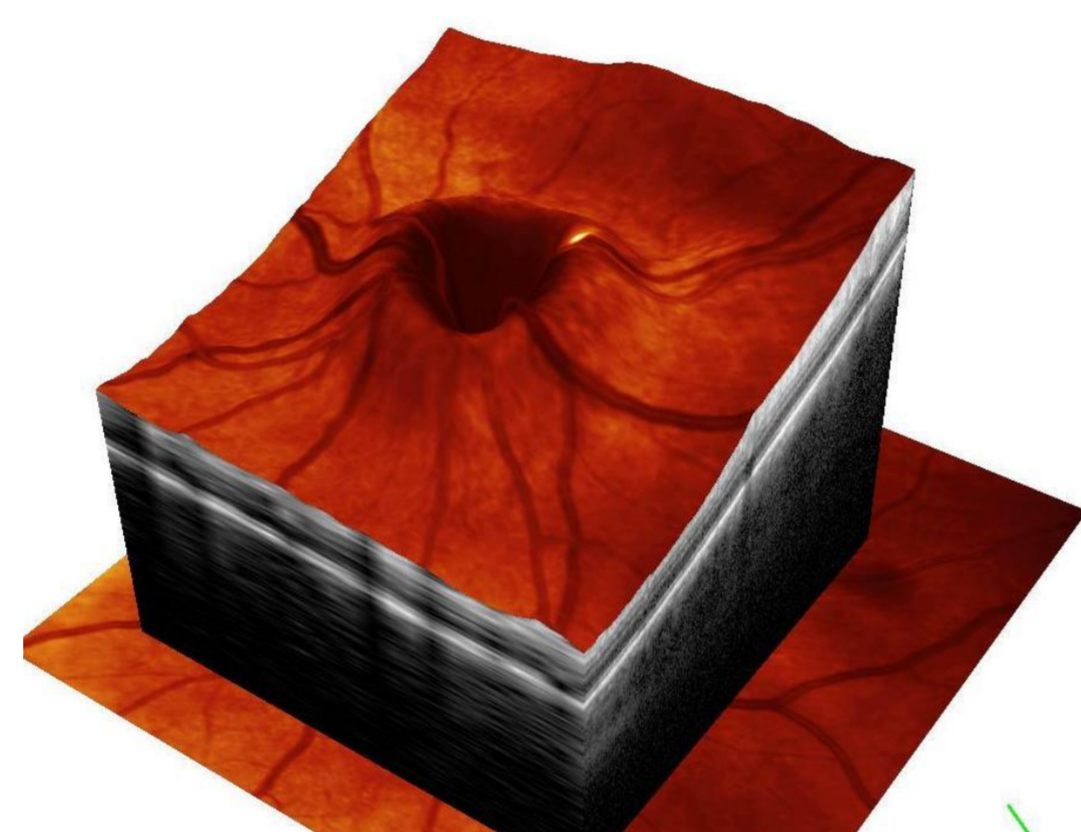


Fig. 4: LE macular edema

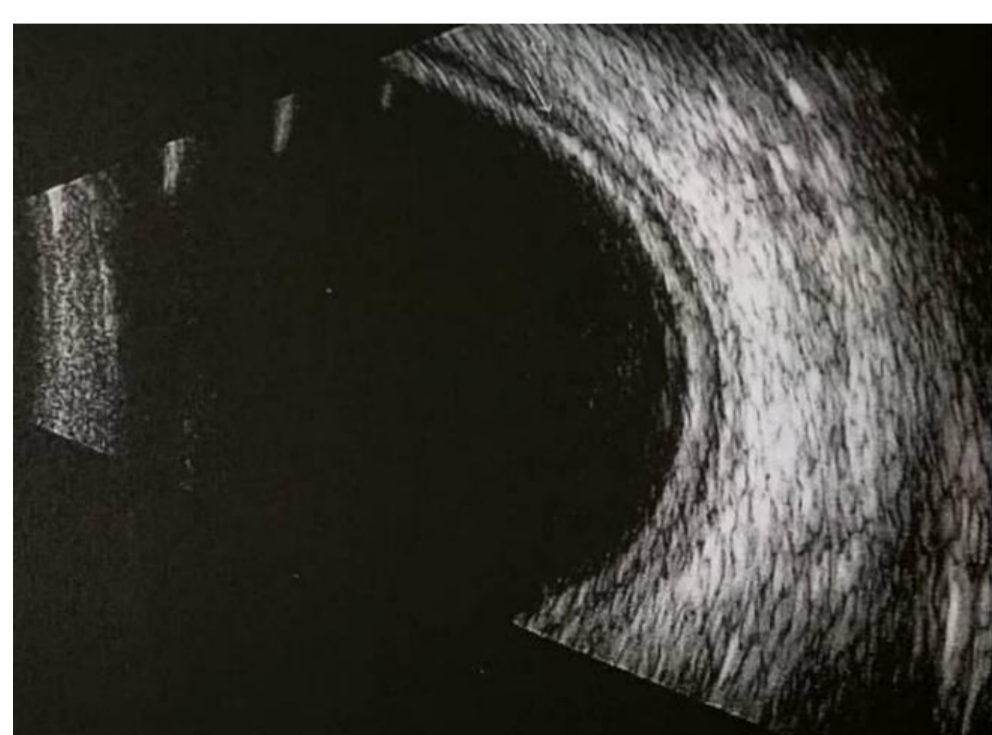
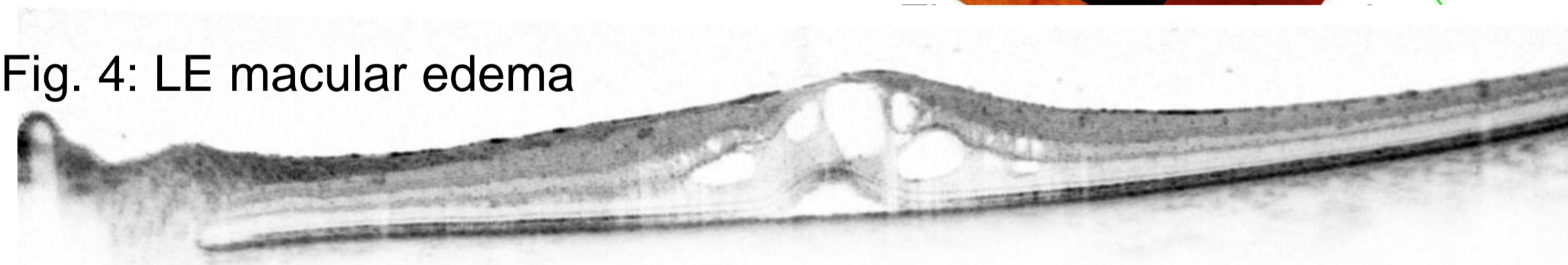


Fig. 5: RE cilio-choroidal effusion

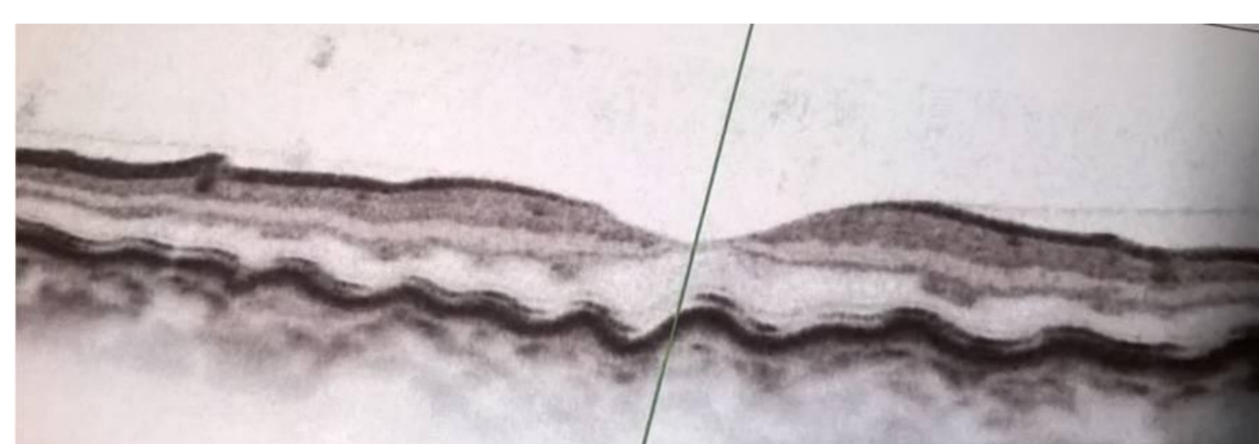


Fig. 6: RE cilio-choroidal effusion ; retinal folds

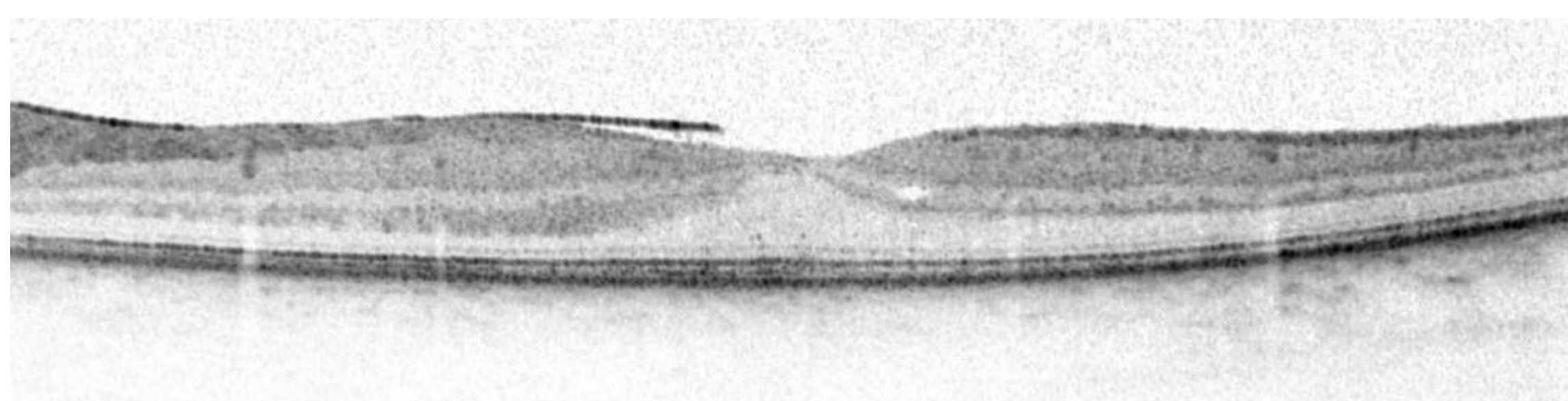


Fig. 7: LE low-grade macular edema during follow-up

Case presentation

A 51-year old male patient affected by gastrointestinal melanoma with lung and lymphonodes metastasis complained of left eye blurred vision, 2 months after starting Vemurafenib. Unilateral iridocyclitis (Fig.1a,b) was diagnosed and topical dexamethasone and mydriatics administered with a good initial response. Nevertheless in the following 16 months of follow-up, he experienced seven relapses of bilateral panuveitis (Fig.2) with optic disc, macular edema, and cilio-choroidal effusion (Fig.3-6). Uveitis relapses were treated with topical dexamethasone, methylprednisolone acetate 40 mg perocular injections and systemic prednisone (initial dose 0.5 mg/kg), combined with Vemurafenib withdrawal for two weeks only. At the last examination, 6 weeks after stopping steroid therapy, although no sign of uveitis was detected in both eyes, the left eye showed epiretinal membranes and low-grade macular edema (Fig 7). Visual acuity was 1 and 0.8 in right and left eye, respectively. Systemic conditions were unchanged.

Conclusion

In patients with metastatic melanoma Vemurafenib significantly improves survival, but might cause uveitis, usually reversible within weeks after stopping drug. Nevertheless in many patients vemurafenib discontinuation is discouraged because of a possible tumor progression. A combination of topical, perocular and low-dose systemic steroids with a close follow-up and short-term Vemurafenib withdrawal can lead to a satisfactory management of uveitis and of its sight-threatening complications, without leading to tumor progression.