

**Liouta A.<sup>1</sup>, Kypraiou S.<sup>1</sup>, Derdera E.<sup>1</sup>, Chroni M.<sup>1</sup>, Sarri E.<sup>1</sup>, Christoforou S.<sup>1</sup>, Vrionis G.<sup>1</sup>, Katri D.<sup>1</sup>**

<sup>1</sup> *Department of Ophthalmology, Pammakaristos Hospital of Divine Providence, Athens, Greece*

## INTRODUCTION

Berlin's edema, also called Comotio retinae is an acute traumatic maculopathy characterized by retinal opacification. Its functional evolution can be variable, going from visual disturbances to temporary visual loss.

The aim of this poster is to present a case of Berlin edema following blunt trauma.

## CASE PRESENTATION

A 63-year-old male patient presented at the emergency department, reporting blunt trauma to his right eye due to an accidental bow strike, approximately 12 hours earlier. He had no history of underlying disease or previous ocular surgery. During physical examination, the best corrected visual acuity (BCVA) was 20/20 bilaterally. The intraocular pressure was 15mmHg in the right eye and 14 mmHg in the left eye. The slit lamp biomicroscopy revealed conjunctival laceration temporally, less than 1mm, and the anterior segment evaluation was normal. The fundus examination showed on his right eye an elevated area of retinal whitening in the macular area as seen in Berlin's edema (fig.1) and the left eye was normal. The patient was treated with tab acetazolamide, dexamethasone and Nsaid drops. The fundoscopic finding subsided within a few days.

## CLINICAL TESTING

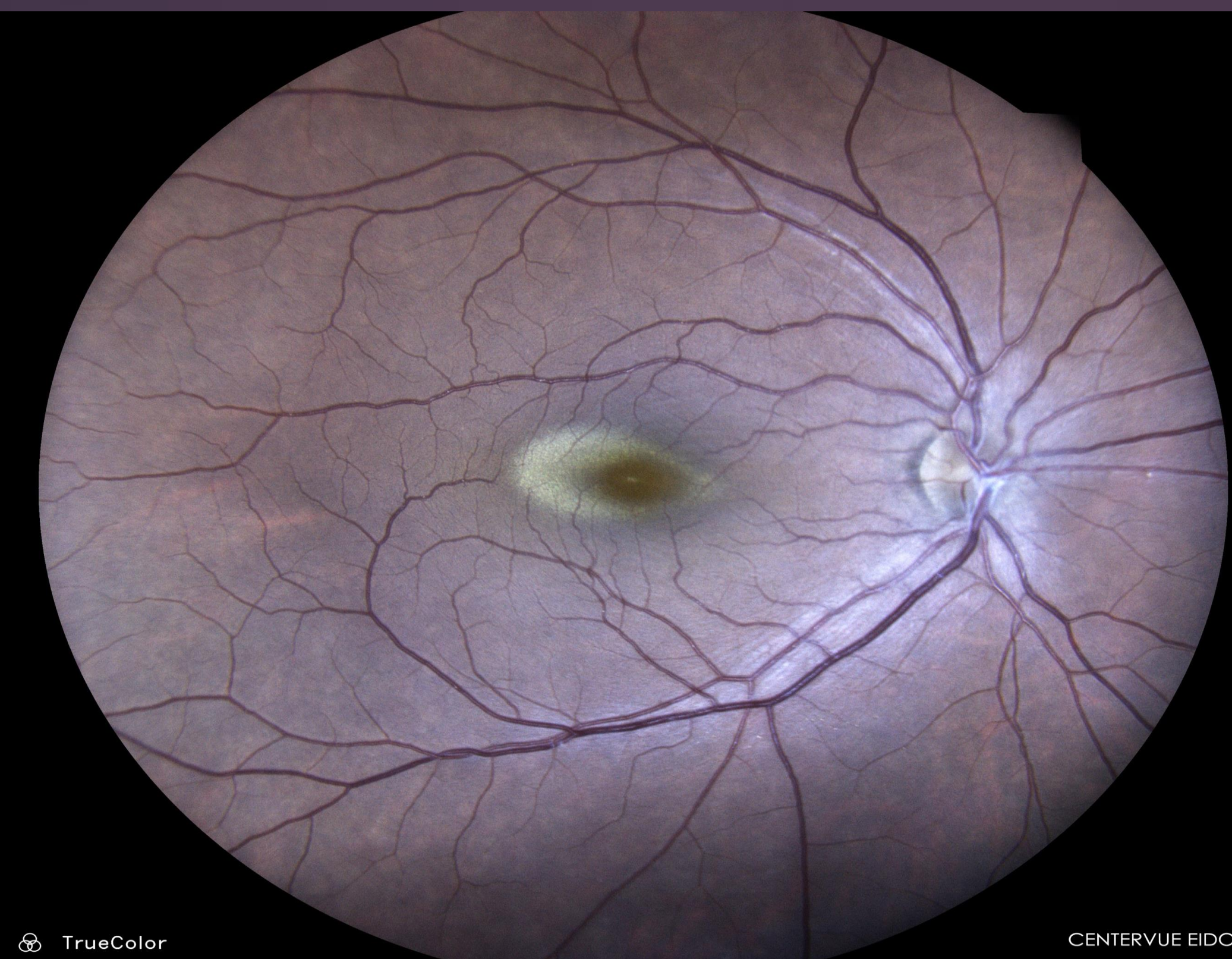


Figure 1: Fundus examination revealed elevated area of retinal whitening in the macular area



Figure 2: After 3 days

## DISCUSSION

Berlin's edema is an acute traumatic maculopathy. It was first described by Berlin in 1873. Comotio retinae is characterized by a transient grey-white retinal opacification occurring after blunt eye trauma. The opacification may involve the peripheral retinal areas or may be limited to the macular area. Berlin's edema commonly corresponds to post-traumatic macular edema. [1]. The pathophysiological mechanism is related to a blunt force transmitted to the retina resulting in the rapid deceleration of eye tissues. Severe ocular blunt trauma may lead to photoreceptor layer disorganization and partial rupture of the blood-retinal barrier [2]. The visual acuity of these patients (BCVA) can be variable depending on the macular involvement severity. The examination of the eye fundus is essential; it should look for macular discoloration, possible retinal hemorrhages, or pigmentary changes. Associated lesions should also be sought in the anterior segment as well as in the retinal periphery.[3] The prognosis is excellent except in case of complications. Berlin's edema is usually self-limiting and treatment is not necessary. [4]

## CONCLUSION

In conclusion, Berlin's edema is a condition of blunt eye trauma. However, despite the initial alarming presentation involving the macula area, the edema resolved within 3 days without any remaining structural or functional alterations.

## INDICATIVE REFERENCES

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