

Bilateral macular ischemia following oral etoposide

A 29-year-old female presented with bilateral diminution of vision for 3 months duration, the onset of which was sudden after 1 week of starting oral etoposide (50 mg/m²) for metastatic breast cancer. Best-corrected visual acuity was 5/60 in the right eye and 6/18 in the left eye. Nevertheless, both eyes anterior segments were unremarkable, except grade 1 relative afferent pupillary defect in the right eye. In addition, fundus examination revealed optic disc pallor in the right eye and scattered dot hemorrhages with cotton wool spots in both eyes [Fig. 1a and b]. Fluorescein angiography showed enlarged foveal avascular zone in both eyes with the presence of large capillary nonperfusion area and pruning of vessels at the temporal macula in the right eye, indicating macular ischemia [Fig. 1c and d].

Although retinal toxicity of many chemotherapeutic drugs has been reported, etoposide alone is not known to cause retinal toxicity.^[1-5] Besides, bilateral sudden onset macular infarction with no evidence of ocular metastasis suggests a direct role of etoposide in this case. The probable mechanism of etoposide toxicity could be due to reduced activity of the UGT1A1 enzyme which is responsible for metabolic clearance of etoposide.^[6] The oncologist should warn the patients about possible ocular side effects before starting chemotherapy and prompt referral to an ophthalmologist should be warranted in case of ocular complaint.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published

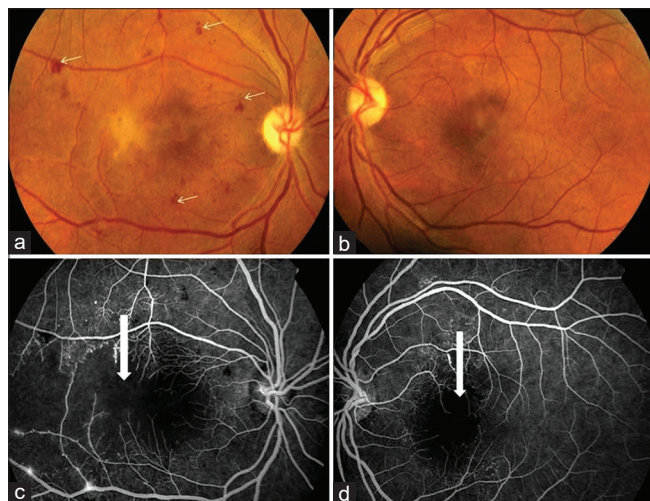


Figure 1: Fundus examination revealed optic disc pallor in the right eye and scattered dot hemorrhages with cotton wool spots in both eyes. (a and b). Fluorescein angiography showed enlarged foveal avascular zone in both eyes with the presence of large capillary nonperfusion area and pruning of vessels at the temporal macula in the right eye, indicating macular ischemia (c and d)

and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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