

disproportionately in erythrocytes in blood.³ Therefore, we suspect that the fluctuation in dosing could be responsible for abrupt changes in plasma levels and thus, disproportionate carbonic anhydrase activity in susceptible individuals. Similarly, it implies that any insult to the red cells could result in an unexpected change of topiramate plasma levels.

In our opinion, the sudden changes in the plasma levels of topiramate should be avoided if possible and its mode of titration be reviewed in conjunction with both neurologists and pharmacologists.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Severn PS, Symes R, Rajendram R, Pal B. Topiramate maculopathy secondary to dose titration: first reported case. *Eye (Lond)* 2015; **29**(7): 982–984.
- 2 Kozner P, Simonova K, Brozek B, Singh K. Late acute myopia syndrome induced by combination of sulphonamide drugs. *J Glaucoma* 2014; **23**(2): e119–e121.
- 3 Shank RP, Doose DR, Streeter AJ, Bialer M. Plasma and whole blood pharmacokinetics of topiramate: the role of carbonic anhydrase. *Epilepsy Res* 2005; **63**(2-3): 103–112.x

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Sir,

Response to 'Comment on Topiramate maculopathy secondary to dose titration: first reported case'

We agree with Kozner *et al* that the maculopathy reported in our case¹ likely represents a mild form of the idiosyncratic reaction causing choroidal effusion, induced myopia, and angle-closure glaucoma that has been reported with topiramate and other sulfur-containing medications. In these cases, it is a consistently reported feature that the reaction generally occurs within days following commencement of the drug or an increase in dose.² In Kosner's case,³ the reaction occurred 3 days after discontinuing topiramate and a sulfur-containing antibiotic, but the patient had commenced the medication 10 days prior to presentation. It is therefore difficult to be sure of the precise trigger in this case.

The important clinical point is that discontinuation of the drug leads to resolution of the symptoms. In some reports, resolution has possibly been hastened following the administration of IV methylprednisolone.^{2,3}

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Severn PS, Symes R, Rajendram R, Pal B. Topiramate maculopathy secondary to dose titration: first reported case. *Eye* 2015; **29**: 982–984.
- 2 Kozner P, Simonova K, Brozek B, Singh K. Late acute myopia syndrome induced by combination of sulphonamide drugs. *J Glaucoma* 2014; **23**: e119–e121.
- 3 Abtahi MA, Abtahi SH, Fazel F, Roomizadeh P, Etemadifar M, Jenab K, Akbari M. Topiramate and the vision: a systematic review. *Clin Ophthalmol* 2012; **6**: 117–131.

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Sir,

TLP: a premature concept

Siaudvytyte *et al*¹ present a literature review and meta-analysis regarding translaminal pressure difference (TLPD) in open-angle glaucoma. Five studies that demonstrated a higher TLPD in open-angle glaucoma have been analyzed in detail.

TLP defined as intraocular pressure (IOP) minus cerebrospinal fluid pressure (IOP – CSF-p)² is an interesting mechanical concept. However, there are some critical considerations concerning the interpretation and implementation of TLP we would like to mention.

First, as discussed by Siaudvytyte *et al*¹ both IOP and CSF-p used in the equation for TLPD are dynamic and fluctuate independently over time with numerous variables affecting both intracranial pressure and intraocular pressure measurements. Therefore, the estimation of TLPD would be best done by a simultaneous measurement of both IOP and CSF-p. None of the presented studies did it and thus all TLPD studies are dealing with two non-dependent and ever-changing variables to a definite time leaving us without a correlation that would fulfill the requirements of the simple physical equation of pressure, which is force over area at a definite time.

Second, in four out of the five analyzed studies, CSF-p has been measured by lumbar puncture and the lumbar CSF-p was extrapolated to the retrolaminar CSF-p. The assumption the lumbar CSF-p might equal the retrolaminar CSF-p only holds if the CSF-p is homogenous distributed in all CSF spaces, inclusively the subarachnoid space of the