Readers response to “Sequential nonarteritic anterior ischemic optic neuropathy in patient on chronic hemodialysis”

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Received: 11 May 2019 / Accepted: 3 June 2019 / Published online: 17 June 2019
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Keywords Non-arteritic anterior ischemic optic neuropathy · Optic neuropathy · Hemodialysis · Renal replacement therapy

To the editor,

It was with exceptional interest that we read Shemesh and Margolin’s article published in the last number of the journal [1], where they report the case of a patient with end-stage kidney disease (ESKD) on renal replacement therapy who developed a nonarteritic anterior ischemic optic neuropathy (NAION) in both eyes in a sequential manner that the authors associated with Intradialytic Hypotension (IDH) episodes. Nevertheless, we consider that there are certain aspects of their report which deserve to be discussed.

Arterial hypertension is a well-known risk factor for NAION, however the authors do not mention if other known risk factors which might contributed were present, such as diabetes, hyperlipidemia or smoking [2]. For instance, the Ischemic Optic Neuropathy Decompression Trial (IONDT) found diabetes associated with fellow eye involvement [3], which itself is not so uncommon, with a reported prevalence of 24% and a 5-year risk of 27% (95% CI: 19–38%) [4]. Although ESKD has been reported as a risk factor for NAION, evidence is inconclusive regarding its association with fellow eye involvement [4].

Given that the number of IDH episodes is related to morbidity and mortality, we must stress that authors report only IDH episodes prior to vision loss without any detail to those occurring between episodes of NAION. And despite their systematized approach, the patient continued to have recurrent IDH episodes, without any detail of the measures used. Thus we wonder if other measures to prevent IDH, such as levocarnitine [5] were implemented. And why the patient was continued on hemodialysis and not transferred to peritoneal dialysis? Or why kidney transplantation was not considered? Also, other measures of dialysis adequacy that have been recommended to prevent IDH episodes besides shortened time and increased frequency of dialysis were not mentioned, such as dry weight assessment and management, evaluation of ultrafiltration rates, and dialysate composition.

In conclusion the authors report an interesting case that encourages debate about neuro-ophthalmological complications of renal replacement therapy; but since correlation does not imply causation, we must advise being careful when considering IDH as the only cause of the patient’s optic neuropathy.

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Funding Authors declare no funding was received for this manuscript.

Compliance with ethical standards

Conflict of interest Author HRIS declares that he has no conflict of interest. Author SACT declares that he has no conflict of interest. Author APFM declares that she has no conflict of interest.

Ethical approval This article does not contain any studies with human or animal participants performed by any of the authors.

Informed consent This article does not involve human participants, and therefore consent is not applicable.

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