Reviewer's report

Title: Deferoxamine retinopathy: Spectral domain-optical coherence tomography findings

Version: 3  Date: 20 May 2014

Reviewer: Francesco Viola

Reviewer's report:

The manuscript by Cheng-Hsiu Wu et al. reports about spectral domain-optical coherence tomography (SD-OCT) findings of a patient with deferoxamine retinopathy. The topic is interesting and relatively new since so far few other authors have investigated it by means of SD-OCT. However, there are major points that need to be addressed.

Background
- Page 4, line 9: change “Heidelberg” with “Heidelberg”

Case presentation
- Page 5, line 10: The authors used the term “Near-infrared autofluorescence”, related to Figure 2. However, it seems that they used near-infrared reflectance, also called “infrared image”. It is not autofluorescence. The authors should clarify and specify (near-infrared autofluorescence can be obtained with an 800-nm filter and excitation with a 787-nm diode laser whilst near-infrared reflectance with 830 nm).

- Page 5, lines 10-12: the authors state “NIA showed hyper-reflective deposits particularly in the parafoveal and perifoveal choroidal areas.”. However, hyper-reflective signal using near-infrared reflectance mainly rises from deposits of pigment in the retinal pigment epithelium around the fovea. I would delete “choroid” in Page 5, line 13, and also modify the legend of Figure 2. About the deposits in the choroid, I think the manuscript would benefit a comment on this OCT finding. I would suggest to use a sentence such as: “We speculate that hyper-reflective deposits detected in the choroid by means of SD-OCT may represent a primarily involvement of this tissue in DFO toxicity, showing a correlation with previous histologic descriptions”. I would emphasize this new OCT finding more than hyper-reflective deposits by means of near-infrared reflectance, already reported in the literature (see below).

Discussion:
- Page 6, lines 2-5: redundant. It is already reported in page 5, lines 12-15
- The authors should add a new reference (MULTIMODAL IMAGING IN DEFEROXAMINE RETINOPATHY. Viola F, Barteselli G, Dell’arti L, Vezzola D, Mapelli C, Villani E, Ratiglia R. Retina. 2013 Dec 27. [Epub ahead of print]) and briefly comment along in their discussion. These authors have firstly described macular lesions in patients with
DFO retinopathy using multimodal imaging including near-infrared reflectance and spectral domain OCT.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests'