Reviewer's report

Title: Transverse Myelitis and acute HIV infection: a case report

Version: 3

Date: 16 January 2014

Reviewer: Hipólito Nzwalo

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Dear Editor

The authors present an interesting and extremely rare case of acute myelitis during HIV seroconversion illness. The paper is well written, and has undoubted educational value. However, there are relevant observations in the manuscript that should be addressed:

Major Compulsory Revisions

1. “Peripheral neuropathy may occur in primary HIV infection but central nervous system disorders in this setting are rare” – please correct: aseptic meningitis is among the most common manifestations of HIV seroconversion.

2. “In tropical areas the differential diagnosis of neurological disorders is particularly difficult, as a broader range of infectious and non infectious causes need to be considered” – reference? if this statement is not evidence based, please remove.

3. “Magnetic Resonance Imaging (MRI) of the brain was normal, but MRI of the medulla showed extensive hyperintense signal in the long TR sequence throughout C4 to T11, especially in the posterior columns, suggesting inflammatory/infectious aetiology” - please include the MRI in the manuscript.

4. Didn’t the authors considered neurosarcoidosis (the patient had cutaneous, pulmonary manifestations, and myelitis) and tested the angiotensin-converting enzyme levels?

5. The discussion is centered in the differential diagnosis of transverse myelitis. There are several and comprehensive updated revisions on the topic. I suggest to eliminate or reduce dramatically the discussion on the differential diagnosis of transverse myelitis – this is not the main message of the case. Instead, the authors should discuss:
   - What are the possible mechanisms of transverse myelitis during acute HIV infection (considering the good recover without HAART).
   - What are the advantages of starting HAART in acute HIV infection with neurological involvement

6. Misdiagnosis of HIV acute infection is common. Virtually any neurological manifestation can occur during HIV acute seroconversion. The authors should briefly discuss what clinical, laboratory hints are important to consider the diagnosis of HIV seroconversion.
7. Considering rarity of acute myelitis and the identification of the Hospital where the patient was treated, the manuscript contains a set information that in combination potentially compromise the anonymity of the patient - in particular the information about the travel to Africa/Luanda. Instead of information about traveling to Africa/Luanda (which is not a risk factor for HIV infection), the authors should deny or affirm unprotected sex, use of intravenous drugs per example.

Minor Essential Revisions

1. Include the MRI
2. Inclusion of a figure with the timeline of clinical events and relevant laboratory findings
3. “Interestingly and contrasting with such a severe presentation in our patient, his wife was asymptomatic throughout her acute stage of the infection but also required HAART after one year of follow-up, alongside her husband” - There is nothing particular in this fact. Between people infected by the same virus, acute and chronic clinical manifestation are in the majority, independent and often different.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

Nothing to disclose.