Reviewer's report

**Title:** Chancre of the eyelid, bilateral chorioretinitis and uveitis as primary manifestation of syphilis in an HIV infected patient: a case report

**Version:** 2  **Date:** 27 April 2012

**Reviewer:** Emanuele Focà

**Reviewer's report:**

In this case report, authors described a case of uncommon presentation of primary syphilis with a chancre of the eyelid, bilateral chorioretinitis and uveitis in an HIV-infected male.

This case report is interesting and well written, however I found some criticism that are displayed below:

**MAJOR COMPULSORY REVISION**

- This case report is based on a probable diagnosis of primary syphilis since there is not a direct detection of T. pallidum neither by the chancre of the eyelid or by ophthalmologic investigations. I feel that, in this cases, a direct detection of Treponema from lesions or infected lymph nodes is mandatory to confirm the diagnosis.

- Polymerase chain reaction (PCR) maybe the preferred method for oral and other lesions where contamination with commensal treponemes is likely in order to have a direct detection of T. pallidum.(e.g. Koek AG, Bruisten SM, Dierdorp M, Van Dam AP, Templeton K. Specific and sensitive diagnosis of syphilis using a real-time PCR for Treponema pallidum. Clin Microbiol Infect 2006; 12: 1233-6).

- There is, moreover, a suspect of secondary syphilis since uveitis maybe a clinical manifestation of a secondary syphilis, particularly in HIV-infected patients (Browning DJ. Posterior segment manifestations of active ocular syphilis, their response to a neurosyphilis regimen of penicillin therapy and the influence of human immunodeficiency virus status on response. Ophthalmology 2000; 107: 2015-23.

Therefore, I think that this case, even if interesting, is an example of “ex iuvantibus” diagnosis because only the improvement after specific treatment and the exclusion of other infectious diseases confirmed the diagnosis. Comments on differential diagnoses between primary and secondary syphilis could be better discussed. Authors should specify this aspect in the discussion section.

Finally, information and serological status should be performed in all partners of an HIV and syphilis infected patient: were the authors able to follow this recommendation? Authors should provide more information on this critical topic (the serological status of the patient’s partner is crucial in order to reinforce the probability of the diagnosis).

**Case presentation:**
- line 6: authors should provide more information on viro-immunological parameters of the patient: how many antiretroviral treatment lines the patient experienced? He failed some treatment? Which antiretroviral regimen was prescribed at the time of presentation of this case? Moreover, median percentage of CD4+ is not interesting to evaluate the immunological status: authors should provide information on CD4+ T cell count as absolute count or percentage at the time of presentation.

- Pag 4, lines 22-23: Incubation period of primary syphilis is 10-90 (usually 14-21 days) days before the ulcer development authors should provide information about the time of probable contamination and the clinical presentation of the ulcer. Moreover authors should not provide too much information about patient’s sexual habits: I feel that a sentence such as “the patients reported an oral sex intercourse with a sperm contamination of his eyes “, maybe enough.

- Page 5, lines 10-12: I think that the reported treatment administered is not supported by international guidelines [http://www.cdc.gov/std/treatment/2010/STD-Treatment-2010-RR5912.pdf]. Why authors prescribed an intramuscular dose of penicillin G at the completion of intravenous treatment? I agree with the intravenous treatment administered however I think that intravenous treatment is enough and patient did not need for another intramuscular dose.

Discussion:
- lines 5-6: authors wrote that “the lesion may be mistaken for achalazion…”, I agree with them but I think that authors should provide information on “differential diagnosis” and discuss this field appropriately.

- pag 7, line 8: authors should add the word “probable” before reinfection.

MINOR ESSENTIAL REVISION

Abstract:
Authors should replace “HIV-positive” with “HIV-infected” in every article’s section.
- Line 2: authors should add “may” before the word “complicates”.
- Line 4: authors should add at the end of the sentence: “with bilateral corioretinitis and uveitis”.

Keywords:
- Authors should add, as keywords “bilateral corioretinitis, uveitis” and remove the words “in HIV positive patient” and “primary”.

Background:
- line 2: authors should add the word “particularly” before “in the setting...”

Case Presentation:
- Pag 5, last line: authors should provide information on CD4+ T cell count evolution after treatment.

Discussion:
- Pag 6, lines 9-10: Authors should remove the sentence “this is believed to be the first report...”, based on my previous comments (unless more details in their diagnostic and therapeutic choices have been better discussed).

- Pag 7, lines 10-11: I suggest to remove the sentence “similarly the immunocompetent...”, I think is pleonastic.

- Pag 7, lines 16-18: authors should add a reference to support their inference on epidemiology of syphilis in HIV-infected people.

- Pag 7, last line: authors should replace the word “Penicillin G” with “antibiotics”-

**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:**

I declare that I have no competing interests' below