

# Worrisome increase in the incidence of ocular syphilis in a French reference center

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## Background:

- Syphilis is a sexually transmitted disease which can infect almost any part of the body. It can be classified as primary, secondary, early latent and tertiary syphilis.
- Most cases of ocular syphilis occur in tertiary syphilis and uveitis is the most frequent ocular manifestation of syphilis. Syphilitic uveitis is considered as a 'great mimicker' since it can manifest as anterior, posterior or panuveitis associated with vasculitis or choroidal neovascularisation.
- The diagnosis of ocular syphilis depends largely on serologic testing. Failure to recognize the ocular manifestations of syphilis or delayed diagnosis and treatment can lead to irreversible visual loss.
- Syphilis is a re-emerging disease, particularly among men who have sex with men and in HIV-infected patients.
- In this context, we set-up a retrospective study to review ocular syphilis cases between 2012 and 2015 in a tertiary referral centre in Paris, France. Our objectives were to analyse trends in the study period on incidence, demographic characteristics, clinical ophthalmological features and outcome.

## Patients & Methods:

- Review of clinical data of patients examined at XV-XX National Eye Hospital from January 2010 to December 2015. Patients with a new-diagnosis of ocular syphilis were identified retrospectively.
- Patients meeting all the following criteria were included in the study: adult patients, intraocular inflammation, specifically affecting the uvea and positive syphilis serology.

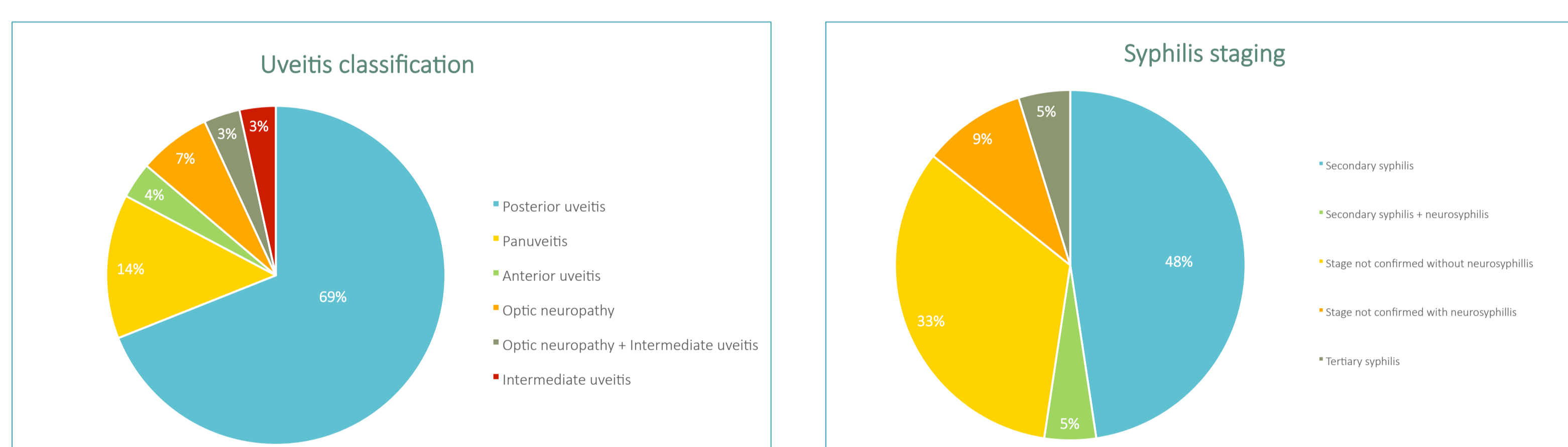
## Results:

- A total of 21 cases of ocular syphilis (29 eyes) were identified between January 2012 and December 2015.
- Visits for ocular syphilis to outpatient clinics increased tenfold over the study period, from 2.22 to 25.21/1000 persons.
- No significant difference between HIV subgroups regarding the proportion of bilateral disease, uveitis type or initial VA.

## Demographics of reported cases

Characteristics	n= 21 patients; 29 eyes
<b>Male : female ratio</b>	21 males: 0 female
<b>Age at presentation, year, median [range]</b>	49 [22-72]
<b>Sexual orientation, n (%)</b>	
<b>MSM</b>	16 (76)
<b>MSW*</b>	4 (19)
<b>Unknown</b>	1 (5)
<b>Positive HIV status, n (%)</b>	6 (28.6)
<b>Laterality (n patients)</b>	
<b>Bilateral</b>	38% (8)
<b>Unilateral</b>	61.9% (13: LE 9, RE 4)

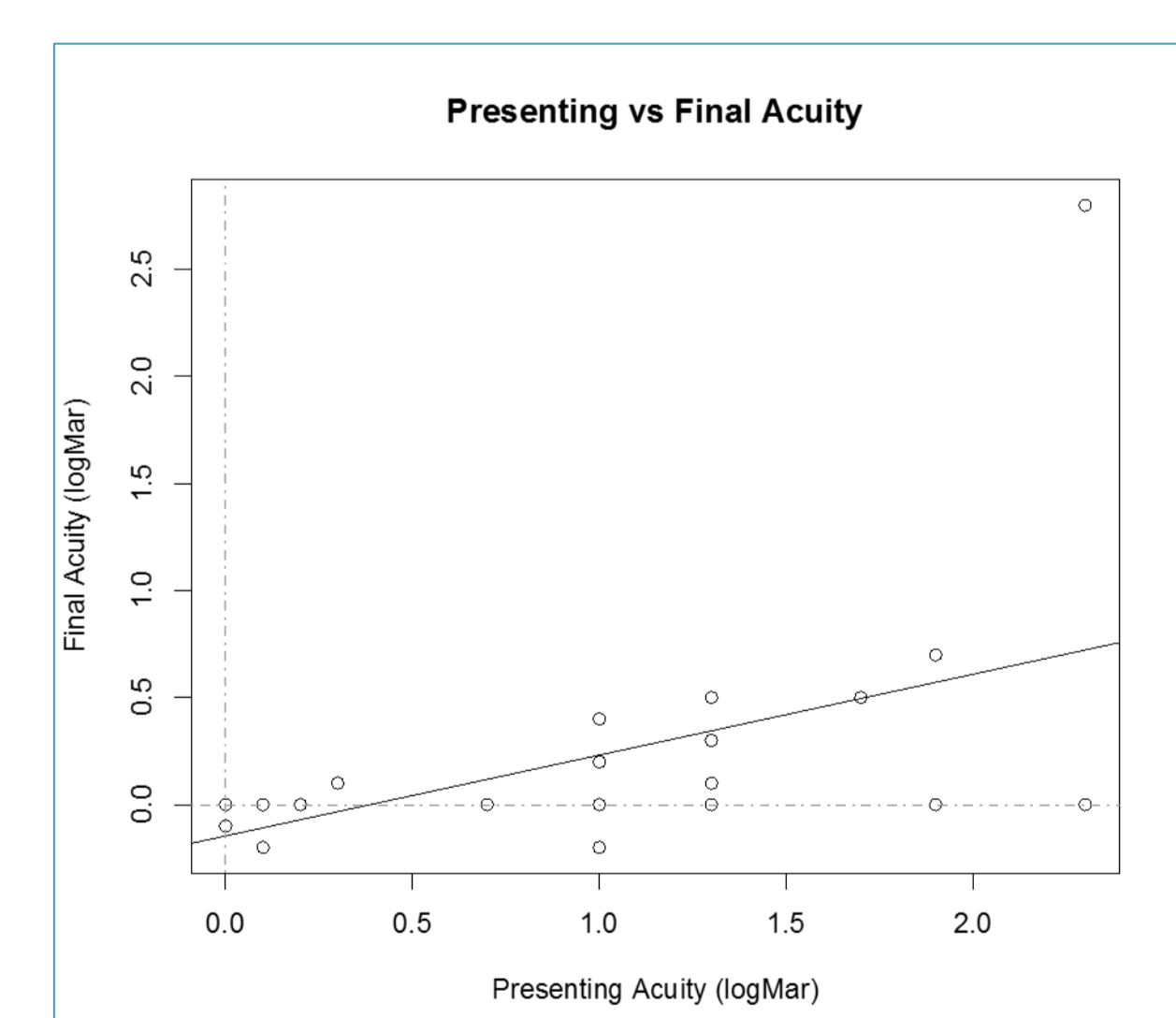
## Clinical presentation



- Most of the patients were treated with daily intravenous penicillin at 24mUI/day for two weeks time.
- In addition to antibiotic therapy, 11 patients also received corticosteroid treatment orally and/or periocular treatment. Corticosteroids were administered in four cases to treat an ocular JHR and in the other seven cases for persistence of ocular symptoms.
- Occasionally, systemic corticosteroids were used to prevent systemic JHR.

## Outcome

- There was no correlation between BCVA at presentation and post-treatment.
- The majority of patients had better final visual acuity than at presentation with a mean initial BCVA of 0,9 to a mean final BCVA of 0,2.



## Conclusions:

- A male predominance has been found.
  - In this study, 76% of ocular syphilitic infections occurred in MSM.
  - The most common finding in the current study was posterior uveitis presenting as placoid chorioretinitis.
  - 60% of the patients presented clinical findings consistent with the diagnosis of syphilis on retinal imaging even before the diagnosis of systemic syphilis was established.
  - This study has shown that visual acuity seen on initial examination was no prediction of the final visual outcome.
- **Blood testing for syphilis should be included in routine laboratory testing for all patients with ocular inflammation. All patients with ocular syphilis should benefit from HIV testing and comprehensive information regarding the prevention of sexually transmitted diseases.**