



Syphilis and HIV coinfection: Indications for lumbar puncture at Instituto de Infectologia Emílio Ribas, Brazil



M. Eira¹, E. Boccardo¹, R. J. Costa Silva¹, I. Moreira¹, L. Ouki¹, U. Barbosa¹, T. A. Matos²; ¹Instituto de Infectologia Emílio Ribas, Outpatient clinic, Sao Paulo, SP/BR, ²Instituto de Infectologia Emílio Ribas, Clinical Laboratory, Sao Paulo/BR

Background

Sexually transmitted infections (STIs) among HIV-infected patients are a large global problem for public health systems. The recent resurgence of syphilis presents a challenge for all physicians, particularly when patients are coinfecting with HIV/syphilis. The diagnosis of neurosyphilis (NS) is also a challenge, especially in coinfecting patients, and the criteria for deciding when to perform a lumbar puncture (LP) in HIV-infected patients with syphilis are still controversial. The aim of this research was to assess the demographic and laboratory data including cerebrospinal fluid serological and biochemical abnormalities in HIV-infected subjects with secondary or late latent syphilis and serum VDRL \geq 1:8.

Methods & Materials

We retrospectively reviewed demographic and laboratory data from 360 patients coinfecting with HIV and syphilis who underwent a LP to rule out NS at the outpatient clinic of the Instituto de Infectologia Emílio Ribas (Brazil), between July 2012 and September 2013. Neurosyphilis was defined by white blood cell (WBC) counts >20 cells/ μ L in the cerebrospinal fluid (CSF) sample or elevated Venereal Disease Research Laboratory (VDRL) titers of the CSF samples.

Results

Table 1: Clinical and laboratory features in HIV-infected patients with neurosyphilis.

Characteristic	No. (%) subjects
Neurosyphilis [†]	140/360 (38.89)
Sociodemographic characteristics	
Age median (years)	41.12 years (22-72 years)
Male	136 (97.5)
MSM	96 (68.33)
Laboratory features	
Reactive CSF-VDRL	120/140 (85.71)
CSF WBC count > 20 cells/ μ L with reactive CSF-VDRL	16/120 (13.33)
Non reactive CSF-VDRL with CSF abnormalities	20/140 (14.28)
CD4* > 350 cells/ μ l	95/120 (79.16)
Viral load* ≥ 50 copies/ml	35/120 (29.16)

[†] Neurosyphilis (NS) was detected in 140/360 patients who underwent lumbar puncture; NS is defined as CSF WBC count > 20 cells/ μ L or a reactive CSF-VDRL test result.

*No data available for 20 patients

Conclusion

STIs like HIV and syphilis are acquired as comorbidities by high risk populations and may influence their original course and prognosis. Rapid diagnosis is essential for management, treatment and cure. We actually perform lumbar puncture for all HIV-infected patients with serum VDRL \geq 1:8, independently of CD4 cell count. Several important questions regarding the diagnosis of neurosyphilis remain unanswered and should be a priority for future research.

Keywords: Neurosyphilis; Lumbar puncture; HIV/AIDS.

E-mail: margaeira@uol.com.br

SUPPORT

