

P0367

Paper Poster Session II

Urogenital and sexually transmitted infections

High incidence of early syphilis in HIV-infected patients seeking HIV care at a university hospital in Taiwan, 2009-2014

Y. Chang¹, W. Liu¹, C. Wu¹, Y. Su¹, P. Wu¹, S. Yang¹, J. Zhang¹, Y. Luo¹, S. Chang¹, C. Hung¹

¹National Taiwan University Hospital, Taipei, Taiwan

Objectives: The cases of newly diagnosed syphilis have been on the rise in the US and several European countries, especially in men who have sex with men (MSM). The increasing rates of syphilis among MSM have raised concerns about the mutually detrimental interactions between HIV infection and syphilis and increased risks of transmission of hepatitis viruses. We aimed to describe the epidemiology of early syphilis among HIV-infected patients at a university hospital in Taiwan.

Methods: Between 2009 and 2014, patients seeking HIV care at the National Taiwan University Hospital, the largest designated hospital for HIV care in Taiwan, were included in this study. The national guidelines for management of HIV-infected patients, recommend serological tests for syphilis (tests for rapid plasma reagin [RPR] titer) provided to patients at the first visit and subsequently every 6 to 12 months and on an-as needed basis. Follow-up of RPR titers every 3 to 6 months for the first 1 to 2 years are recommended for patients who receive treatment of syphilis. Early syphilis, including primary, secondary and early latent syphilis, was defined according to STDs treatment guidelines of US CDC in 2010. A new episode of syphilis was defined as an increase of RPR titer by 4-fold or greater after ever achieving serological response or development of new symptoms of primary or secondary syphilis during follow-up. Observation continued until patient's death, loss to follow-up and end of the study on 30 October, 2014, whichever occurred first.

Results: During the 6-year study period, 3103 patients seeking HIV care and 2751 (88.7%) who had 2 or more RPR titers were included for estimation of the incidence of early syphilis. Of the 2751 patients, 770 patients (28.0%) had one or more episodes of early syphilis during the follow-up. Compared with patients without early syphilis, patients with early syphilis were younger (mean age, 32.6 vs 36.6 years), and more likely to be MSM (88.1 vs 70.2%) and hepatitis B surface antibody (anti-HBs)-positive (56.0% vs 49.4%), and to have RPR titers of 4 or greater at baseline (40.3 vs 13.6%). There were no differences in the prevalence of hepatitis B surface antigen (HBsAg) (14.1 vs 14.7%) or hepatitis C virus antibody (anti-HCV) (7.9 vs 9.3%). The incidence rate of syphilis was 7.61 per 100 person-years of follow-up (PYFU) (95% CI, 6.55-8.68) in 2009-2010, which increased to 11.24 PYFU (95% CI, 10.18-12.30) in 2011-2012 and 12.60 PYFU (95%CI, 11.57-13.63) in 2013-2014. Patients with early syphilis were significantly more likely to seroconvert for HCV than those without early syphilis during the follow-up (9.7% vs 1.8%).

Conclusions: The incidence of early syphilis is increasing in HIV-infected patients who are retained in care and early syphilis is associated with HCV seroconversion in Taiwan.