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Editorial

Serological Tests Of Syphilis In HIV Infection

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Abstract:
Serological tests for syphilis may show varying results in association with HIV infection.Thus care should be taken to interpret these results.
Key Words: Serological test, Syphilis, HIV

The diagnosis of syphilis depends on clinical findings, examination of lesions for treponemes and on serological tests. Serological tests are divided into nontreponemal and treponemal tests. Non treponemal tests like VDRL, RPR, toluidine red unheated serum tests can be used for screening and treponemal tests like FTAbs assay, TPHA, ELISA etc can be used for confirmation.

There is epidemiological synergy between HIV and other STIs including syphilis. In most patients with early HIV infection, the clinical features, response to treatment are similar to those in non-HIV infected persons. With advancing immunosuppression all of these may be significantly altered.

On the one hand a significant number have false positive VDRL tests due to polyclonal B cell activation and on the other development of a new positive VDRL may be delayed in patients with new infections. FTAbs test may be negative due to immunodeficiency. Thus dark field examination of appropriate specimens should be performed in any patient in whom syphilis is suspected and even if VDRL is negative.

In recent years the reliability of the serological tests for diagnosis of syphilis in HIV infected individuals has been questioned and some have discussed that false positive treponemal test results occur less frequently than false positive cardiolipin antigen tests.

In a patient with positive serum VDRL test, neurological findings and abnormal spinal fluid examination should be considered to have neurosyphilis, regardless of CSF VDRL result.

The ability to detect treponemal DNA by PCR may be helpful in understanding the pathogenesis of syphilis as well as the diagnosis of syphilis in HIV infected patients and in establishing adequate treatment.

Syphilitic patients who are HIV positive are less likely to experience serologic improvement after recommended therapy than patients who are HIV negative. Therfore consideration should be given to design alternative therapeutic regimens.

Serologic follow up of patients treated for syphilis should include quantitative nontreponemal tests at the end of 1,2,3 months and 3 monthly intervals thereafter. If the titer does not decrease by two fold dilutions in 3 months for primary syphilis or with 6 months for secondary syphilis. Patient need to be reevaluated for treatment failure or reinfection. For comparing the results same test should be performed before and after therapy

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