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Transmission and Diagnosis of Human Immunodeficiency Virus Infection: An Update[☆]



FR - Actualización en la transmisión y el diagnóstico de la infección por VIH

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PALABRAS CLAVE

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In recent decades, antiretroviral therapy has seen human immunodeficiency virus (HIV) infection shift from a fatal to a chronic disease. Nonetheless, HIV infection continues to be one of the greatest public health challenges worldwide. During the course of their illness an estimated 80–95% of HIV-positive patients will develop a skin disease, which in some cases may be the first manifestation of the disease. Therefore, although the general care of HIV patients is beyond the scope of dermatology, it is important that dermatolo-

gists have a knowledge of basic aspects of HIV infection, as well as the most notable recent advances.

According to the latest data published by the United Nations (for 2017), there are an estimated 36.9 million people infected with HIV worldwide.¹ This represents a 14% increase since 2010, but has been accompanied by decreases in both mortality and the incidence of new infections since access to high activity antiretroviral therapy has become widespread.¹

The PARTNER and PARTNER 2 studies were carried out to clarify the risk of transmission of HIV between serodiscordant couples (i.e. couples consisting of 1 HIV-positive and 1 HIV-negative individual who did not use barrier protection methods and in which the seropositive patient was receiving antiretroviral treatment and had maintained an undetectable viral load).^{2,3} Both studies reported a spousal transmission rate of 0%.^{2,3} These findings prompted the development of the U=U (Undetectable=Untransmittable) campaign and underscore the enormous importance of early detection and treatment of infection, not only for individual prognosis but also as a measure to control transmission at the population level.

Diagnosis of HIV infection is established in 2 phases: an initial screening test (generally an enzyme-linked immunosorbent assay [ELISA] test) and a subsequent confirmatory test (Western blot or HIV1/HIV2 differentiation immunoassay).⁴ In Spain, most laboratories use fourth-generation ELISA for screening and Western blot as a confirmatory test. Fourth-generation ELISA has allowed a

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reduction in the window period to 15–20 days, as it detects both anti-HIV immunoglobulin (Ig) M and IgG, as well as the viral antigen p24.⁴ Six weeks after the risky sexual contact, a negative fourth-generation ELISA result is considered definitive.⁴

Since 2018, an over-the-counter self-test for early diagnosis of HIV has been available. This test only detects anti-HIV antibodies, and therefore the window period is longer (approximately 3 months), and despite its high sensitivity and specificity, a positive result must be confirmed using conventional tests.⁴

In conclusion, it is important for dermatologists to be up to date with HIV transmission and diagnosis given the cutaneous manifestations that can occur in HIV patients.

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