HTLV screening in Spain should be universal in pregnant women and persons tested for sexually transmitted infections

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Background: HTLV-1 infection is endemic in many countries from Latin America. Spain is the European country hosting the largest migrant population from LATAM (1.5 million out of the 47 million country’s population). HTLV-1 establishes chronic infection once acquired. Lifetime 10% of carriers will develop associated illnesses, including HAM/TSP and ATLL. HTLV-1 is mostly transmitted sexually, perinatally through breastfeeding and by blood transfusions or transplants. Although HTLV-1 screening in Spain is currently performed in blood donors and transplantation, testing of pregnant women and STI patients is scarce.

Approach: The Spanish HTLV national register was created in 1989. It records demographic and clinical information as well as outcomes for each patient using a case report form. More than 50 clinics contribute actively. Data are updated on a yearly basis.

Outcomes: A total of 428 individuals with HTLV-1 infection have been reported in Spain. Female represent 62%. Mean age at diagnosis is 42 years-old (range 3-78). HTLV-associated illnesses were diagnosed in 96 (22%), being HAM/TSP more frequent than ATLL (55 vs 33). The transmission route was considered as very likely for 207: heterosexual in 133 (64%), vertical in 35 (17%), and transfusion/transplantation in 17 (8%). Overall 65% of HTLV-1 diagnoses were made in persons born in LATAM. Among 71 (17%) native Spaniards, most of them acknowledged having had a sex partner from LATAM. A total of 22 new diagnoses of HTLV-1 were reported in Spain during 2021. Two out of 13 women were pregnant.

Significance: Given that there are neither vaccines nor antiviral drugs to treat HTLV-1 infection, and that once acquired is lifelong, prevention remains the only weapon to fight this retrovirus. Anti-HTLV screening of target populations should be cost-effective in communities with a relatively large proportion of individuals from endemic regions. In Spain, our data support the universal screening of pregnant women and patients attended at STI clinics.

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