

## Late presentation of HTLV-1 infection is more frequent in native Spaniards than in migrants from endemic regions

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**Background.** Although only 10% of persons infected with HTLV-1 may develop virus-associated diseases lifelong, misdiagnosis of asymptomatic carriers frequently leads to late diagnoses.

**Approach.** A nationwide HTLV-1 register was created in Spain in 1989. A total of 428 infected persons had been reported by the end of 2021. We examined the main demographics and clinical features of this population at the time of first diagnosis.

**Outcomes.** The incidence of HTLV-1 has remained stable with 20–25 new diagnoses yearly during the last decade. Women represent 62%. Mean age at diagnosis was 42 years-old (range 3-78). Migrants from Latin America represent 65%, whereas 17% are native Spaniards. Up to 96 (22%) individuals presented clinically with HTLV-1-associated conditions, including subacute myelopathy (n=55; 57%), T-cell lymphoma (n=33; 34%), or *Strongyloides stercoralis* infestation (n=8; 8%). HTLV-1 diagnosis had been made either at blood banks (44%) or at clinics (56%). It should be highlighted that Spaniards and especially Sub-Saharan Africans were overrepresented among patients presenting with HTLV-1-associated illnesses (see Table), suggesting that misdiagnosis and late presentation are more common in them compared to Latin Americans.

**Significance.** Given that 22% of individuals first presenting with HTLV-1 infection in Spain are symptomatic, underdiagnosis must be common. Whereas screening in blood banks mostly identifies asymptomatic Latin American carriers, a disproportionately high number of Spaniards and Africans are unveiled too late, when they already have developed classic HTLV-1 illnesses.

Clinical presentation of individuals with HTLV-1 diagnosis in Spain

	Total	LATAM	Sub-Saharan Africa	Native Spaniards	LATAM vs SA/NS P
No.	428	280	49	71	-
Asymptomatic	332	223	32	48	79.6% vs 67.8% (p=0.013)
Symptomatic	96	57	15	23	20.4% vs 32.2% (p=0.013)
HAM/TSP	55	32	5	17	11.4% vs 18.3% (p=0.06)
ATLL	33	19	8	6	6.8% vs 11.7% (p=0.1)
Strongyloides stercoralis	8	6	2	-	-