

Case series: Pediatric T-cell Human Lymphotropic Virus type 1 and its clinical expression.

Abstract

Human T-cell Lymphotropic Virus type 1 (HTLV-1) was the first retrovirus to be identified and associated with oncogenic activity. It is estimated that approximately 10-20 million people in the world are infected. The clinical manifestations most commonly associated with HTLV-1 infection include T-cell leukemia/lymphoma and myelopathy or tropical spastic paraparesis associated to HTLV-1 infection. The purpose of this study is to describe clinical and demographic characteristics in pediatric patients with HTLV-1 infection.

Methodology and patients: Ambispective case series analysis, with collection of medical records and subsequent description of demographic data (sex, origin, age) and clinical characteristics in 16 patients with HTLV-1 infection. The patients were collected between January 2017 and July 2021 in a pediatric institution in Cali, in a reference hospital in the Southwest region of Colombia.

Results: Thirteen patients came from the Colombian Pacific coast, nine with significant nutritional deficiencies. Seven showed dermatological compromise. Eight patients presented images compatible with inflammation and chronic lung injury, six of the eight patients with opportunistic infections. Coinfection with other microorganisms was also observed one case presented with meningeal tuberculosis, another patient presented with simultaneous infections including malaria, leptospirosis and toxoplasmosis, and a third patient presented intestinal parasitosis and soft tissue infection by *Streptococcus pyogenes*. Three patients had concomitant autoimmune diseases and a fourth patient was highly suspicious of having polymyositis.

Conclusions: The different clinical findings with simultaneous HTLV-1 infection broadens the panorama to suspect infection by this virus. More studies are required to achieve a direct association between structural lung disease, autoimmune diseases, immunodeficiency and HTLV-1 infection. This study aims to raise interest and awareness of an ancient but neglected disease.