



POSTER PRESENTATION

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Adult T-cell leukemia/lymphoma in a Caucasian patient after sexual transmission of HTLV-1

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Adult T-cell leukemia/lymphoma (ATLL) is an aggressive T-cell lymphoproliferation caused by human T-cell lymphotropic virus type-1 (HTLV-1). This oncogenic human retrovirus can be acquired by mother-to-child transmission through prolonged breast-feeding, sexual transmission, or from transfused infected blood cells or intravenous drug abuse. HTLV-1 infects approximately 5–10 million individuals worldwide and, among them, 1–5% will develop ATLL during their lifetime. Four major geographic molecular subtypes (genotypes) have been reported including the cosmopolitan a-subtype, the Central African b-subtype, the Central African/Pygmies d-subtype and the Australo-Melanesian c-subtype. The results of several studies showed that most cases of ATLL develop in individuals who have been infected with HTLV-1 as young children via their mothers' breast milk. The very rare ATLL cases observed following transfusion or sexual transmission are still being debated. Here, we report on a Caucasian French patient, with HTLV-1-seronegative parents, who developed ATLL, characterized by a clonal T cell skin proliferation of CD4+ and CD25+ cells, 18 years after highly probable sexual transmission of HTLV-1 through repeated unprotected sexual intercourse with a Cameroonian woman. Indeed, genotyping of the patient's virus revealed infection with an HTLV-1 b-subtype strain, typically of Central African origin, especially Cameroon. This case definitively confirms the hypothesis that ATLL can develop, albeit rarely, after infection during adulthood, outside breast-feeding.

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