Clinical spectrum of neurosyphilis: a 9-year retrospective study at a neurology department of a tertiary care hospital in Lisbon

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Abstract

Background: Neurosyphilis is characterized by a broad range of neurological findings, potentially complicating its diagnosis. Although neurosyphilis is no longer a common disorder, its prevalence is rising in Western countries and its past reputation as the great imitator should not be forgotten. The objective of this study is to describe the clinical spectrum of patients with neurosyphilis admitted to a Neurology department of a tertiary care hospital in Lisbon.

Methods: A retrospective database search using the International Classification of Diseases (ICD) 9 codes was performed to identify all patients with the diagnosis of neurosyphilis, admitted between 2001 and 2009. Collected data included demographics, clinical features, cerebrospinal fluid (CSF) changes, neuroimaging findings and outcome.

Results: We identified 16 patients that met diagnostic criteria for definite or probable neurosyphilis. Mean age was 48.5 years, males being more frequently involved. The most frequent clinical patterns were meningovascular (37.5%), general paresis (31.3%) and meningitis (25.0%). CSF pleocytosis and elevated CSF protein were found in 81.2%. Neuroimaging findings were nonspecific. In this study, 3 patients had a past history of primary syphilis and 2 were HIV seropositive.

Conclusions: Compared to the preantibiotic era, a lower frequency of late neurosyphilis was observed, mainly of tabes dorsalis, similar to that reported in other modern series. Neurosyphilis is still characterized by clinical polymorphism. Providers should maintain a high index of suspicion for neurosyphilis among patients with syphilis, particularly those with HIV infection.