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Distal peripheral neuropathy in HIV-infected children

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Background

Distal symmetric peripheral neuropathy (DSPN) is the most common form of peripheral neuropathy in HIV-infected children, but little is known about its prevalence in HIV-infected children living in the developing world. The aims were to determine the frequency of symptoms, signs and risk factors for DSPN in HIV-infected children living in Peru.

Methods

Cross sectional study of children older than 18 months attending the Instituto Nacional de Salud Del Niño. Medical records were reviewed to obtain information regarding HIV infection and treatment. Patients older than 5 years old completed a standardized questionnaire regarding neuropathic symptoms. All subjects underwent detailed neurologic examination and nerve conduction study. Presence of DSPN was defined according to guidelines of the American Academy of Neurology, American Academy of Electrodiagnostic Medicine, American Association or Physical Medicine & Rehabilitation [1].

Results

90 subjects were enrolled. Age ranged from 18 months to 18 years. 12 patients (13.3%) had DSPN, with diminished ankle jerks and paresthesias the most common clinical findings. In 84 (93.3%) subjects HIV infections was acquired vertically, 76 (84.4%) were on antiretroviral

treatment, and 51 (56.7%) were at C3 CDC classification. Malnutrition was associated with presence of DSPN (OR 12.82; IC 95% 1.14–144.42). Duration of HIV infection, viral load, CD4 count and antiretroviral treatment were not associated with presence of DSPN.

Conclusion

Distal symmetric polyneuropathy was present in 13.3% of HIV-infected children and was associated with malnutrition. Future longitudinal studies could examine other risk factors associated with DSPN in HIV-infected children.

References

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