REFERENCES


RESULTS

• Subjects were mostly men (81%), getting infected having sex with other men (47%), with a median (interquartile range) age of 43 (38.50) years, current CD4 count of 522 (380,718) cells/µL, and nadir CD4 count of 188 (80,285) cells/µL. The remaining demographic and clinical characteristics are displayed in Table 1.

• NCI was present in 82 (52%) individuals, of whom 42 (54%) reported cognitive complaints. Rate of impairment was significantly related to time since HIV diagnosis (p<0.01).

• The sensitivity and specificity found for the NEU Screen were 73.1% and 74.3%, respectively, and positive predictive value (PPV) 79.9% and negative predictive value (NPV) 71.4%. When the NEU abbreviated battery was analyzed, the sensitivity obtained was 97.5%, the specificity 100%, PPV 100%, and NPV 97.3% (Table 2).

• When different sub-groups were compared in terms of representative demographic and clinical variables, the highest accuracies were observed in women (sensitivity: 80%, specificity: 78.5%); patients with >5 (80%), 121% (80%, 91%) years of education; and <5 years since HIV diagnosis (86.3%, 62.9%), as shown in Figure 1.

Figure 1. Accuracy of the NEU Screen according to representative variables.

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• According to logistic regression models none of the demographic or clinical variables were significantly associated with the correct classification. When the NEU Study sample and the present were joined (262 subjects), analyses still did not find any factor in association.

METHODS

Study Population:

Data from 156 HIV-infected outpatients receiving care in HIV Unit of the Germans Trias i Pujol University Hospital (Barcelona, Catalonia, Spain) were used for these analyses. They were selected because they were ≥18 years old, had undetectable plasma viral load for 26 months prior the study assessments, and had not participated in the original study of the NEU proposal.

Study Variables:

Neurocognitive functioning was assessed by the application of a standard comprehensive battery of neuropsychological tests (15 measures, 7 domains). Demographic and clinical variables were also recorded. NCI was defined as performing ≥1 standard deviation below the normative mean in ≥2 cognitive areas. T1 standard deviation below the normative mean in ≥6 months prior the study assessments, and had not participated in the original study of the NEU proposal.

Statistical Analyses:

NCI was considered as gold standard, and sensitivity and specificity tests were applied to study the accuracy of the NEU Screen. A proposal of an abbreviated battery also offered in the NEU Study was additionally tested (7 scores, 7 domains). Logistic regression was used to analyze variables linked to the correct classification. In this regard, we joined the sample of the NEU Study and the sample of the present work to investigate possible links more consistently. In order to study distinct patient profiles in which NCI could be more optimally identified, we also developed analyses in subgroups of patients separated by representative demographic and clinical factors.