MELANOMAS

Tumor infiltrating lymphocytes in acral lentiginous melanoma: a study of a large cohort of cases from Latin America.

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Abstract

PURPOSE: Acral lentiginous melanoma (ALM) is a poor prognosis subtype and is the most prevalent in non-Caucasian populations. The presence of tumor infiltrating lymphocytes (TILs) has been associated with poor prognosis in melanoma. A large cohort of ALM cases was studied to determine status of TIL and its association with outcome.

METHODS: All patients with cutaneous melanoma presenting from 2005 to 2012 at Instituto Nacional de Enfermedades Neoplasicas in Peru were retrospectively identified. Clinicopathological information was obtained from the medical charts. A prospective evaluation of TIL was performed. Analysis of association between ALM and clinicopathological features including TIL as well as survival analysis compared the outcome of ALM to whole group and extremity NALM was performed.

RESULTS: 537 ALM from a total of 824 cutaneous melanoma cases were studied. Older age (p = 0.022), higher Breslow (p = 0.008) and ulceration (p < 0.001) were found to be more frequent in ALM. Acral had worse overall survival (OS) compared with the whole group (p = 0.04). Clinical stage (CS) I-II patients had a median OS of 5.3 (95% CI 4.3-6.2) for ALM and 9.2 (95% CI 5.0-7.0) for extremity NALM (p = 0.016). Grade 0 (absence of TIL), I, II and III were found in 7.5, 34.5, 32.1, and 25.9%, respectively. Lower TIL grade was associated with larger tumor size (p = 0.003), higher Breslow (p = 0.001), higher Clark level (p = 0.007), higher CS (p = 0.002), extremity location (p = 0.048), histological subtype ALM (p = 0.024) and better OS (p = 0.001).

CONCLUSIONS: ALM is highly prevalent in Peru and carries poor outcome. Lower TIL levels were associated with poor outcome and ALM.