

Clinical features and prognosis of acral melanoma: a series of 154 patients

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Acral melanoma (AM) of the extremities is a rare form of cutaneous melanoma (CM) in the Caucasian population, while it is more common proportionally in Asia and in Africa. It is associated with a poor survival due to the delay in the diagnosis and to the hidden location on the palms, soles and nail unit.

Our aim was to study the prevalence, clinical characteristics and prognostic factors of patients diagnosed with AM in the past four decades at our dermatoooncology center and to compare the results with data from the literature, concerning the Caucasian population.

A retrospective review of patients diagnosed with AM between January 1976 and July 2013 was conducted at the Department of Dermatology in Szeged, Hungary. Data with regard to demography, primary tumor (location, BT, Clark level), SLN status, clinical stage and delay in diagnosis were collected. Kaplan-Meier analysis was used to determine the overall survival (OS) rates.

Out of the 4593 CM patients diagnosed during the 37 years, 154 (3.35%) had AM. The mean age of our patients at the time of the diagnosis was 65.3 years. The majority of patients in this series were female (55.8%) and Caucasian (100%). Of the 154 cases, 90% were located on the lower extremities, 50% on the soles. Out of 116 patients more than 50% waited more than one year and 12% more than three years to consult a physician with the acral skin lesion. The mean BT was 3.905 mm (median 3.344 mm) and nearly 70% of the tumors were thicker than 2.00 mm. Eighty-three patients (55.7%) presented at the time of the diagnosis with local disease (stage I and II); 44 (29.5%) had stage III disease; and 22 (14.7%) had distant metastases (stage IV). Patients with AM had 5- and 10-year OS rates of 61.8% (95% CI, 53.66-71.07%) and 42.7% (95% CI, 33.71-54.13%). OS rate was significantly better in T1 melanoma and significantly worse in T4 melanoma ($p < 0.001$). SLN biopsy is performed routinely at our department since 1999. During the past thirteen years, SLN biopsy was performed in one-third ($n=50$) of the patients with AM. 52% had positive SLN, which was associated with a significant worse OS ($p < 0.001$) and higher BT compared with SLN negative patients SLN (4.616 vs. 2.020 mm).

We found a dramatic increase in the prevalence of CM in the past four decades in our region, while the relatively low prevalence of AM remained the same. Our patients with AM were at advanced age at the diagnosis and presented with thick melanoma in hidden localization. Survival of patients with AM was poor compared to other subtypes of CM. Important prognostic factors included BT and SLN positivity. We found that the majority of our patients were waiting more than one year to consult a physician for their acral skin lesion. For a better survival we consider it essential, to improve patients' awareness in common and rare subtypes of melanoma and to emphasize the importance of early diagnosis.