Cutaneous melanoma: a prospective study of 42 cases *

Melanoma cutâneo: estudo prospectivo de 42 casos

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Abstract: A prospective longitudinal study of 42 cases of cutaneous melanoma showed that: 71.2% of patients were between 50 and 79 years of age; 45.1% were male and 54.7% female; most patients (88%) were white; most lesions (54.7%) were located on the trunk (p = 0.039); the most common clinical and histological pattern was the superficial spreading melanoma (52.3% / 26.1%) (p = 0.02); 16 cases (38.1%) were classified as stage IA and 9 cases (21.4%) consisted of melanomas *in situ*.
Keywords: Diagnosis; Epidemiology; Melanoma; Pathology; Skin neoplasms

Resumo: Estudo longitudinal prospectivo de 42 casos de melanoma cutâneo revelou: 71,2% entre 50 e 79 anos; distribuição etária homogênea entre os gêneros masculino (45,1%) e feminino (54,7%); predominância de brancos (88%); localização no tronco (54,7%) (p=0,039); tipo clínico-histológico expansivo superficial (52,3% / 26,1%) (p=0,02); 16 casos (38,1%) IA e nove melanomas *in situ* (21,4%).
Palavras-chave: Diagnóstico; Epidemiologia; Melanoma; Neoplasias cutâneas; Patologia

Risk factors for cutaneous melanoma are sun exposure, the patient's phenotype, family history and having had a previous melanoma. The stage of the tumor at the time of diagnosis is the principal prognostic factor. Surgery is the standard initial treatment for the localized form of the disease. Sentinel lymph node biopsy is indicated for nodal staging. In patients with metastases, biotherapy or systemic chemotherapy may be attempted, while radiotherapy should be considered palliative.

In a prospective, longitudinal study conducted between 2004 and 2008, 42 cases of cutaneous melanoma were treated at the *Clementino Fraga Filho* teaching hospital of the Federal University of Rio de Janeiro and were submitted to:

Excisional biopsy with a margin of 1 cm (on the face or in the case of sentinel lymph node); Breslow thickness defines the optimal margins: < 1 mm (a 1-cm margin) and > 1 mm (a 2-cm margin), as well as the need to increase margins. [1,2]

Incisional biopsy (6-mm punch) in the face, external ear, palmoplantar and subungual regions. [1,2]

Clinical staging: palpation of regional lymph nodes; if asymmetrical or hardened, ultrasonography (USG) was performed to evaluate metastasis (globular appearance, hypoechogenicity; protuberance at the border with/without changes in the hilus; nodal enlargement) and Doppler ultrasonography was performed to evaluate angioarchitecture. [3,4] Next, lymph node puncture was carried out using fine needle aspiration for cytology and/or biopsy. [5,6] Nodal therapeutic dissection was performed whenever lymph node involvement was confirmed.

Full blood count, erythrocyte sedimentation rate (ESR), lactic dehydrogenase levels (LDH), liver function tests, and chest x-ray (in the absence of signs and symptoms).

Computed tomography (cranium, chest, abdomen-pelvis), bone scintigraphy, whole-skeleton x-ray (in cases with distant symptoms).

Surgery was performed at the Dermatologic Surgery and Plastic Surgery Units in cases of resection of lesions, at general surgical theaters in cases of lymph node puncture/biopsy or lymph node drainage and at the Orthopedics Department in cases of amputation.

Routine follow-up in this institute is based on

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Table 1: Case distribution according to age group, gender and ethnicity

	White		Non-white		
Age group	**Male**	**Female**	**Male**	**Female**	**Total / %**
20-29	1	-	-	-	1 (25%)
30-39	1	1	-	1	3 (7%)
40-49	1	2	-	-	3 (7%)
50-59	5	1	-	1	7 (16.6%)
60-69	4	2	-	1	7 (16.6%)
70-79	5	9	1	1	16 (38%)
80-89	1	4	-	-	5 (11.9%)
Total / %	18 (42.8%)	19 (45.2%)	1 (2.3%)	4 (9.52%)	42 (100%)

Clementino Fraga Filho Teaching Hospital, Federal University of Rio de Janeiro (2004-2008) | P= 0.79

Breslow thickness and is maintained for an indeterminate period of time except for cases of melanomas in situ, in which patients are not required to attend any further follow-up. [1] The American Joint Committee on Cancer (AJCC 2002/2009) does not define any specific routine. [7,8] The sentinel lymph node technique complies with the AJCC 2002/2009 recommendations (clinically negative regional lymph nodes, Breslow 1 mm and 4 mm) and those of the GBM (Brazilian Melanoma Group) (Breslow thickness >0.76 mm; <0.76 mm when associated with ulceration and/or histological regression); excisional biopsy with a 1 cm margin. Statistical analysis was conducted using the chi-square test.

The age of the male patients was similar to that of the women. There were more white-skinned individuals in the 70-79 years age group (38%) (Table 1). In 22 cases (52.3%) including 15 women, the melanoma was of the superficial spreading type (SSM) (p = 0.022) (Table 2). In 23 cases, the melanoma was situated on the trunk (54.7%) (p=0.039). Histologically, cases consisted of 11 SSM (26.1%), 10 melanomas in situ (23.8%), 7 lentigo maligna melanomas (LMM) (16.6%), 3 acral lentiginous melanomas (ALM) (7.1%) and 1 desmoplastic melanoma (2.3%). Ten cases were not classified. According to the AJCC 2002 and 2009 staging, 9 cases were T0, 16 IA, 2 IB, 5 IIA, 4 IIB, 1 IIIA, 1 IIIC, 3 IV and 1 Tx. [1,7,8] The case of the desmoplastic neurotropic melanoma progressed with two local recurrences. [1]

The two cases of subungual melanoma submitted to amputation of the hallux went on to develop lymph node disease and metastases (skin/lung/liver) within one year. Subungual melanomas, a variant of ALM, generally develop in the ungual matrix of the hallux or thumb. In the case of ALM, there is no form of prevention and its risk factors are totally unknown. [9,10] It is rare, with reported incidence rates that range from 0.7% to 3.5% of all cases of melanoma in the general population. Its prognosis is poorer, with five-year survival rates ranging from 16 to 87%.

In the case of amelanotic melanoma, a rare, more aggressive variant, metastases occurred two years after diagnosis despite treatment with interferon. One case of SSM was found in the interscapular region associated with residues of an intradermal melanocytic nevus. The percentage of transformation of a melanocytic nevus in melanoma ranges from 1% to 20%. [1] In the case of ALM in the foot with metastases to four inguinal lymph nodes, the patient

Table 2: Case distribution according to ethnicity, gender and clinical type

	White		Non-white		
Clinical type	**Male**	**Female**	**Male**	**Female**	**Total / %**
Superficial spreading	7	14	-	1	22 (52.3%)
Acral lentiginous	2	2	1	3	8 (19%)
Lentigo maligna	7	1	-	-	8 (19%)
Nodular	2	2	-	-	4 (9.52%)
Total / %	18	19	1	4	42 (100%)

Clementino Fraga Filho Teaching Hospital, Federal University of Rio de Janeiro (2004-2008) | P= 0.022

received adjuvant treatment with interferon. Following treatment, the patient developed achromic patches on the face that regressed with the use of topical hydrocortisone 1%. Although the simultaneous occurrence of metastatic melanoma and vitiligo-like depigmentation is known, the causal relationship remains controversial.

In one patient, the melanoma developed with a stasis ulcer on the left tibia, with satellitosis and intransit metastases. He was submitted to infrapatellar amputation and inguinal lymph-node drainage (without metastases). The subcutaneous tissue of an ulcer is exposed to environmental agents (bacterial colonization) and venous stasis may trigger epidermal hyperplasia and proliferation of interpapillary ridges. Two patients with ALM were submitted to ilioinguinal lymphadenectomy. From meticulous pathological examination of the resected lymph node, the following determinants of staging are inferred: the number of metastatic lymph nodes and whether the tumor is microscopic (clinically occult) or macroscopic (clinically apparent at physical or radiological examination).

In this series, the pattern of cutaneous melanoma was found to be similar to that found at a previous evaluation (1993-2003), outlining the profile found in a tertiary hospital. ❑

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