

STUDY ON CUTANEOUS MELANOMA INCIDENCE DURING THE 2010-2013 PERIOD IN BIHOR COUNTY, ROMANIA

Endres Laura*, Maghiar Adrian*, Bungau Simona*, Puscasiu Mircea*

* University of Oradea, Faculty of Medicine and Pharmacy, 1 Decembrie St., no.10, Oradea, Romania, e-mail: laura_endres@yahoo.com

Abstract

The incidence of cutaneous melanoma in recent years is continuously increasing. Frequently occurs after the age of 45-50 years. It can have any location on the skin or mucosa. Women are more frequently diagnosed with cutaneous melanoma in the calves and men have a higher incidence of cutaneous melanoma in the upper thorax. The etiology is unknown. There are many risk factors of which the most important is the chronic and cumulative exposure to the UV radiation, especially for people with skin photo-type I and II. The more delayed diagnosis is the more reserved prognosis. Appropriate surgical treatment according to clinical form and tumor stage as well as early detection of melanoma can greatly improve the prognosis.

Key words: melanoma cutaneous, melanoma incidence, location of melanoma, melanoma forms

INTRODUCTION

Cutaneous melanoma is a melanocytic malignant tumor. There are 4 clinical-pathological forms (Dan Forsea et al. 1998):

- Superficial spreading melanoma - over uneven lesion with irregular borders, polychrome, the grid of the skin disappears and the tumor extends into the periphery in "oil stain";
- Lentigo maligna melanoma or Dubreuilh melanosis – lesion with chromatic polymorphism, irregular edges in some parts resorption producing a pigment, and the appearance of pigmented nodules that may ulcerate announces transformation into melanoma;
- Nodular melanoma-friable nodule, polychrome of 5-7 mm to several cm, which can bleed easily and can ulcerate, perinodular it can appear a pigment halo;
- Acral melanoma asymmetrically pigmented macular lesion palmar, plantar or fingers located, on the surface may appear an invasive tumor that grows rapidly.

Subungual melanoma, ocular or mucous are particular topographic variations diagnosed late and with reserved prognosis. Early clinical diagnosis is the main factor for timely detection of malignant lesions. Simple inspection of the skin and observing the change in shape, size, color of an injury in a short period of time are the main clinical diagnosis criteria

for melanoma. People with a family history of melanoma, people with multiple nevi or dysplastic nevi have the greatest risk, multiple periodic dermatologic evaluation is very important (Abbasi NR et al. 2004).

Prognosis depends on the stage in which the primary tumor is detected. For patients with localized melanoma without nodules or local metastasis prognosis is good, and for those with distant metastases mortality at 5 years is 69%. (Wit NJ et al. 2004).

Suspicious lesions should be surgically excised with safety margins between 1-2 mm depending on the size and depth of the tumor, and then sent for histopathological examination. When confirming the diagnosis of melanoma surgical reexcision is practice with wide margins between 1-4 cm, depending on the tumor location and size, mainly to prevent recurrence for this group of patients with melanoma occurrence of relapses is a high risk of mortality (Balch CM et al 2001).

There is no study to demonstrate which would be the optimal surgical excision margins. Current recommendations are 0.5 cm for melanoma in situ and 2-3 cm for melanoma > 4mm in depth (Sober AJ et al 2001; Schwimmer J et al 2000).

MATERIAL AND METHOD

We have studied 151 melanoma cases, hospitalized in the Emergency County Hospital Oradea, during 2010-2013. Most patients in our study were male (54.97%), male / female ratio being 1.2:1. (Table 1).

Table 1

The distribution of the cases according to gender

Gender	No.	%
Female	68	45,03
Male	83	54,97
Total	151	100

Over 55% of patients were from urban areas (55.63%), the ratio of urban / rural was 1.3:1 (table II).

Table 2

The distribution of the cases according to the environment

Environment	No.	%
Urban	84	55,63
Rural	67	44,37

Studied patients were aged between 25 and 86 years, the majority being in the age group of 51-70 years (55.70%). The mean age was 58.33 years (Fig. 1).

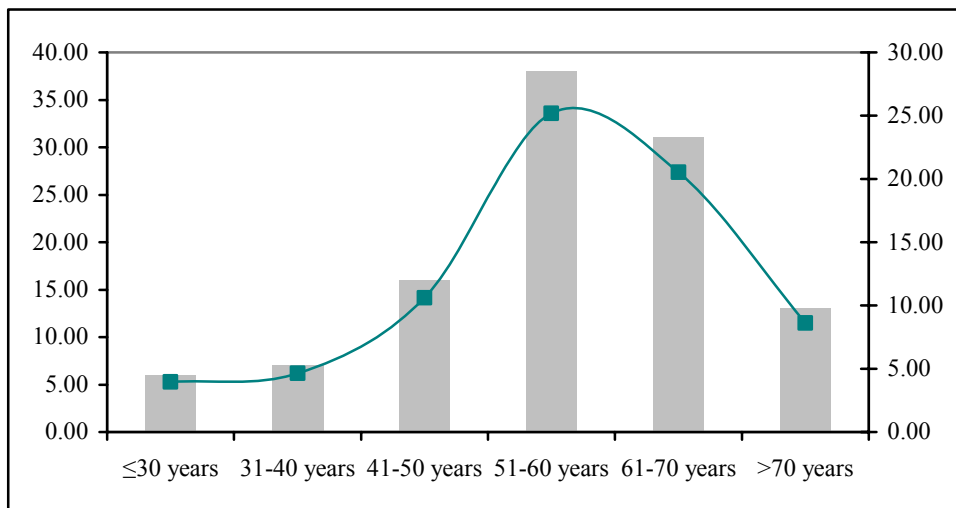


Fig.1 The distribution of the cases according to age

The most cases were located at the lip and trunk level (by 18.54%), followed by lower limbs (15.23%) and the face (12.58%) (Fig 2).

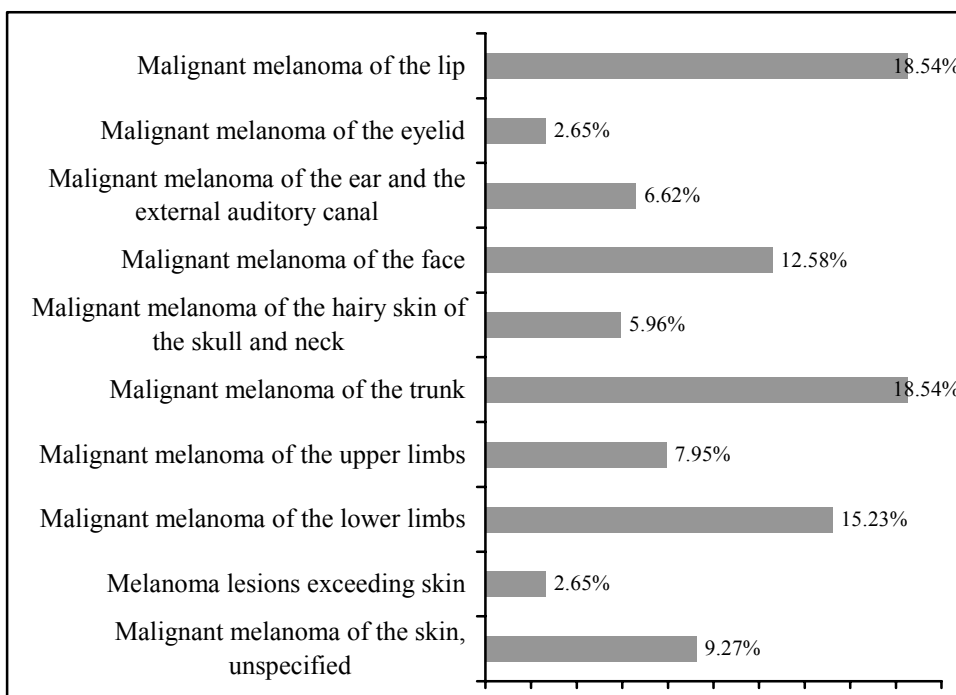


Fig. 2. The distribution of the cases according to location

RESULTS AND DISCUSSIONS

During the studied period, 47 cases have been operated, representing 31.13% of all patients. We have not registered any operated case of lip melanoma (Fig 3).

Of the total batch, we recorded 14 cured cases (9.27%), including one case of melanoma of the face and hairy skin of the skull and neck, 5 cases of cutaneous melanoma of the trunk and 7 cases of the lower limbs (Table 3).

Deaths represented 6.62% of all cases (Table 4).

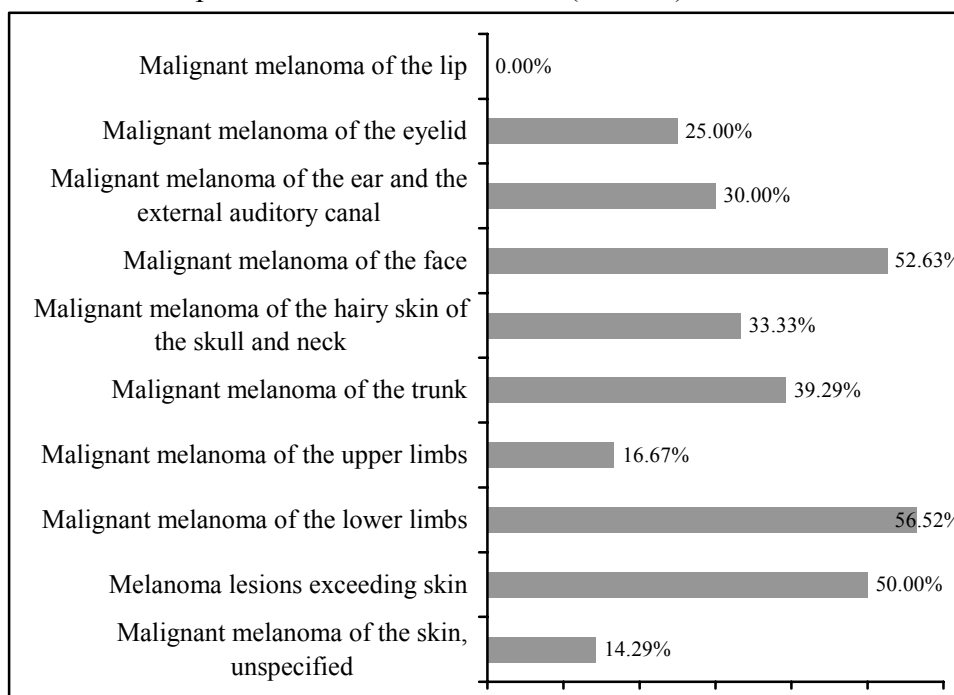


Fig.3. The share of surgical interventions depending on location

Table 3

The distribution of the cases according to evolution

Evolution	No.	%
Cured	14	9,27
Improved	124	82,12
Stationary	3	1,99
Decease	10	6,62

Table 4

Mortality depending on the location of melanoma

Location of melanoma	No.	%
Malignant melanoma of the lip	2	7,14
Malignant melanoma of the eyelid	1	25,00
Malignant melanoma of the ear and the external auditory canal	0	0
Malignant melanoma of the face	0	0
Malignant melanoma of the hairy skin of the skull and neck	0	0
Malignant melanoma of the trunk	1	3,57
Malignant melanoma of the upper limbs	2	16,67
Malignant melanoma of the lower limbs	2	8,70
Melanoma lesions exceeding skin	0	0
Malignant melanoma of the skin, unspecified	2	14,29
Total	10	6,62

CONCLUSIONS

Monitoring patients after primary melanoma tumor discovery is very important, especially for early detection of recurrence that the sooner are discovered the easier can be treated.

Tracking patients with melanoma is done in the first two years at 3 months, then every 6 months for the next five years, after which it goes on tracking once a year.

Tracing psychosocial support, tracing family history of melanoma and continuous education of patients about avoiding exposure to UV radiation and frequent skin examination may positively influence the future evolution of cutaneous melanoma.

REFERENCES

1. Abassi NR, Shaw HM, Rigel DS, et al. Early diagnosis of cutaneous melanoma: revisiting the ABCD criteria. *JAMA*.2004;292:2771-6
2. Balch CM, Buzaid AC, Soong SJ, et al. Final Version of the American Joint Committee on Cancer staging system for cutaneous melanoma. *J Clin Oncol*.2001;19:3635-48
3. Balch CM, Soong SJ, Gershenwald JE, et al. Prognostic factor analysis of 17,600 melanoma patients: validation of the American Joint Committee on Cancer melanoma staging system. *J Clin Oncol*.2001;19:3622-34
4. Barth A, Wanek LA, Morton DL. Prognostic factors in 1521 melanoma patients with distant metastases. *J Am Coll Surg*.1995;181:193-201
5. Balch CM, Soong SJ, Smith T, et al. Long term results of a prospective surgical trial comparing 2 cm versus 4 cm excision margins for 740 patients with 1-4 mm melanomas. *Ann Surg Oncol*.2001;8:101-8

6. Bono A, Bartoli C, Clemente C, et al. Ambulatory narrow excision for thin melanoma ($\leq 2\text{mm}$): results of prospective study. *Eur J Cancer*.1997;33:1330-2
7. Bologna Jean L, Joseph L, Jorizzo, Ronald P, Raini, *Dermatology*, Second Edition, 2008, pp 1745-1769
8. Cascinelli N. Margin of resection in the management of primary melanoma. *Semin Surg Oncol*.1998;14:272-5
9. Forsea Dan, Raluca Popescu, Catalin Mihai Popescu, *Compendiu de dermatologie si venerologie*. Editura tehnica 1998
10. Garbe C, Büttner P, Bertz J, Burg G, d'Hoedt B, Drepper H. Primary cutaneous melanoma. Prognostic classification of anatomic location. *Cancer*. May 15 1995;75(10):2492-8
11. Hausauer AK, Swetter SM, Cockburn MG, Clarke CA. Increases in melanoma among adolescent girls and young women in California: trends by socioeconomic status and UV radiation exposure. *Arch Dermatol*. Jul 2011;147(7):783-9
12. Purdue MP, Freeman LE, Anderson WF, Tucker MA. Recent trends in incidence of cutaneous melanoma among US Caucasian young adults. *J Invest Dermatol*. Dec 2008;128(12):2905-8
13. Rhodes AR, Weinstock MA, Fitzpatrick TB, Mihm MC Jr, Sober AJ. Risk factors for cutaneous melanoma. A practical method of recognizing predisposed individuals. *JAMA*. Dec 4 1987;258(21):3146-54
14. Schuchter L, Schultz DJ, Synnetvedt M, et al. A prognostic model for predicting 10-year survival in patients with primary melanoma. The pigmented Lesion Group. *Ann Intern Med*.1996;125:369-75
15. Sober AJ, Chuang TY, Duvic M, et al. Guidelines of care for primary cutaneous melanoma. *J Am Acad Dermatol*.2004;51:579-86
16. Tang L, Zhang W, Su B, Yu B. Long Noncoding RNA HOTAIR Is Associated with Motility, Invasion, and Metastatic Potential of Metastatic Melanoma. *Biomed Res Int*. 2013;2013:251098.
17. Veronesi U, Cascinelli N. Narrow excision (1-cm margin). A safe procedure for thin cutaneous melanoma. *Arch Surg*.1991;126:438-41
18. Williams ML, Sagebiel RW. Melanoma risk factors and atypical moles. *West J Med*. Apr 1994;160(4):343-50