

Diagnosis and treatment protocols of cutaneous melanoma: latest approach 2010

I. Petrescu¹, C. Condrea¹, A. Alexandru¹, D. Dumitrescu¹, G. Simion², E. Severin³, C. Albu³, D. Albu³

¹Department of Plastic Surgery and Reconstructive Microsurgery, University Emergency Hospital Bucharest

²Department of Pathology, University Emergency Hospital Bucharest

³Department of Genetics, "Carol Davila" University of Medicine and Pharmacy

Abstract

Cutaneous melanoma is the most aggressive skin malignancies with increasing rate of incidence in the latest decades. New imaging technique plays an important role in melanoma management: dermoscopy and computer dermoscopy, ultrasound, MRI, CT, PET and PET/CT. Due to the dermoscopy and lesion diagnosis in early stages the increasing number of curative melanoma are registered. Sentinel lymph node biopsy became a compulsory phase for patients with tumor thickness >1 mm. Serological biomarkers proved to be a necessary investigation for melanoma diagnosis, follow-up and treatment response. Current TNM melanoma staging is based on AJCC classification since 2001 witch includes new elements like histopathologic ulceration in stage I and II and lymph node micro- and macrometastases in stage III. Treatment protocols include surgical tumor excision with only 1-2 cm safety margins and radical lymphadenectomy is performed after positive sentinel lymph node biopsy. The adjuvant treatment in advanced stages including chemotherapy, unspecific immuno-therapy and interferon offers poor results regarding free disease terms rate of survival. The advanced therapeutic procedure like golden nanospheres and gene therapy are recently studied and represent an alternative for future treatment of melanoma. Follow-up protocols have a great importance for detection of the melanoma recurrences and include clinical, serological and imaging evaluation. Despite all new knowledge and technological support the advanced stage melanoma management still remain an unsolved problem.

Key words: cutaneous melanoma, dermoscopy, sentinel lymph node biopsy, TNM melanoma staging, melanoma imaging diagnosis, serological biomarkers, surgical treatment of melanoma, melanoma follow-up protocols

Corresponding author: Ina Petrescu, MD, University Emergency Hospital Bucharest, Splaiul Independenței nr. 169, sector 5, 050098 Bucharest, Romania, E-mail: inapetrescu@yahoo.com