# **Our Experience with Malignant Melanoma**



# Healthcare

**Keywords:** melanoma, radio-lymphoscintigraphy, sentinel lymph node, regional metastasis.

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# **Abstract**

Melanoma is skin tumor with higher malignity. Malignityi of melanocites occurs not only in the epithelium of the skin, but also in the retina, mucosis of the respiratory, vaginal and anus road. In the world are thought to occur around 10.9 cases in 100,000 inhabitants. ¹ But it depends directly by geographic region and type of skin. People who are very vulnerable are those that are exposed to intense sunbathing and have less skin pigment (blonds). In our country we do not have exact statistics on the incidence of melanoma, but we have shown our experience in surgical treatment in combination with alpha interpheron. For the first time in our country we have started applying radio-lympho-scintigraphy in search of the sentinel lymph node. This method significantly increases the chances for the survival of patients with regional metastases. Our results confirm our success in treatment and comply with results from the literature. This fills us with optimism for the fight against melanoma and defeats the oldest opinion that the diagnosed patient "is actually finished.

# **Epidemiology and Risk Factors**

The incidence of malignant melanoma is growing these last 40 years by nearly 5% per year [1]. Unfortunately in our country we do not have the accurate statistical processing data of malignant diseases, and therefore we could not conclude for incidence. A subjective impression makes us think that melanoma is not a frequent tumor in our region.

They all agree that the sun's rays are the main cause of transformation in melanocites. But people with less pigment have major skin risk. Also dysplastic nevus, those congenital ones, junctional nevusis are more likely to have larger melanoma alterations. [7] But, in order to prevent it or isolate in earlier stage, the specific rules exist as it is the one of ABCDE: A. Asymmetry B. irregular borders, C. Color variation, D. Diameter over 6 mm, E. Elevation. Ulceration, that should be determined by clinical examination, is of paramount importance, as it has very good importance in TMN classification and once in the sickness prognosis. <sup>8</sup> Not all melanomas are with the black color, about 10% are achromatic (without melanine).

### Diagnostification

It is of great significance the experience of the doctor and the use of dermatoscope because about 90% of melanomas may be detected with the usual examination. (Fig.1)



Diagnosis is finally placed with histopathological examination. Usually is done with excisional biopsy, but in cases of giant nevuses and those in delicate regions (eyelid, labial commissure, etc..), it can be done the incisional biopsy. [4] Growth in depth is in direct correlation with the further prognoses of sickness and life span. Even in our system are used the Clark and Breslow system in order to document the epidermo--dermal penetration of the lesion.

### The Aim of the Study

Long ago it was thought that the treatment of patient diagnosed with melanoma may not be of any help. From the literature we learn that melanoma tumor is not so catastrophic. The success of treatment, even in cases with regional lymphatic metastasis, is not small. We have not larger series of cases, but those that we have, we will try to compare with statistics from the literature.

# **Methodology and Our Cases**

In principle, the radial growth of many tumors do not worry us much. But it is intradermal vertical growth that worries us and that it imposes for continuation of treatment. It should be noted that ulceration of the tumor was found clinically, it is of particular importance, since the prognosis and surgical intervention forms differ from non-ulceracion forms. To the histopathologically verified melanoma, however, we go with complementary excision that should be at least 2cm longer than the earlier excision. Melanoma is the only tumor that gives sideway kutane metastasis, and that in reality they are limphogene metastasis. When it is determined the depth of tumor up to 1mm (according to Breslow), the patient is only observed in following years. The prognosis is usually quite reasonable. In cases when the tumor is of 1-4 mm, however, the regional lymph nodes should be examined. Today as a "golden rule" is applied radio-lympho-scintigraphy. On the grounds of radioisotope accumulation, we do everything to remove the sentinel lymph node and histopathological examination. [1] Depending on histopathological diagnosis, we decide for dissection of the regional nodes. In our hospital we apply radio-lympho-scintigraphy in cooperation with "Diagnostic Center Plus" in Prishtina. Further it is continued with complementary examinations to ascertain whether illness has passed from the local stage to the systemic. So besides radio-lympho-scintigraphy and sentinel lymph node, it should be necessarily done complementary examinations such as: ultrasonography, computerized tomography, magnetic resonance, PET scan, bone scintigraphy, laboratory examinations such as lactate dehydrogenase and protein C100. If melanoma has given remote metastases, then we give up from dissection of regional joints and palliative therapy is usually applied because the prognosis is extaordinary bad. In the case when no remote metastases are found, dissection of regional lymph nodes needs to be done, which implies a dissection of the parotid region, supraomohioid, radical or modified dissection of the neck depending from the localization of the primary tumor. [2, 3, 5, 6, 9] Further complementary treatment should continue with chemotherapy or immunotherapy (interferon α), or biological therapy (interleukin 2). Melanoma is resistant tumor in radiotherapy but it is used more as paliation in reducing the pain of incurable cases. In our institution during the last 14 years, we had a total of 23 cases of melanoma verified. In three cases we have had melanoma with superficial stretch and depth of less than 1 mm (Clark 1, Breslow 1). In 11 cases we had melanoma with depth up to 3 mm. Observation All cases are in observation since it is not found growing of the regional lymph nodes. In both cases we have done elective dissection of lymph nodes, because melanoma has been clinically ulcerous. In other cases we have to do with the advanced diseases (about 4mm deep - Clark or Breslow 4) where we had the presence of the increased lymph nodes, and in one case even matastases in the brain, in undiagnosed tumor and untreated before. In one case tumor infiltration has been with the reaction of 5 mm without lymph node. The patient has been of an age 82 and with whom we didn't continue with other surgical treatment or adjuvant treatment. The patient lives today after four years without signs of sickness.

In both cases was done dissection of regional nodes. In the first case the primary tumor has been in zigomatic region and the metastases in the parotid region has imposed upon us the parotidectomy, and then the modified dissection of the neck (Fig. 2 & 3).



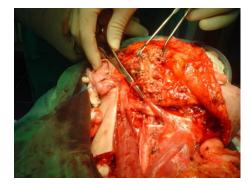


Fig. 2 Fig.3

Hisopatologically metastase is verified in a lymph node in the parotid region and in jugulodigastric region. Is was continued with immunotherapy (interferon  $\alpha$ ) and the patient entered in the eighth year of postoperative life without signs of sickness.

In the second case the patient has had melanoma in the rigat aurikula with a satellite (kutane metastasis) in proximity (Fig.4). Excission has been done of primary tumor and the histopathologic verification (Clark 3). With clinical and utrasonographic examination are found increased lymph nodes in the subokcipital, juguloidigastric region and in the middle region of neck. Subokcipital joints dissection has been done and modified disekcion of the neck Fig. 4 and 5.





The are found four okcipital metastatic nodes, two jugolodigastric nodes and one in the middle region of neck. The patient has nihilated the adjuvant treatment further. Few months without full 5 years after surgery, the patient is diagnosed with metastases in the brain and ended in fatality.

In all other cases patients have not continued with the treatment in our institution and have we any information for the continuation of their treatment and life status.

#### **Results and Conclusion**

Given the small number of cases in our caustics, we can not make a valid comparison of five years life span. We may conclude that superficial melanoma has a very good prognosis. Stage where melanoma infiltrates up to the reticulated layer, also has quite a good prognosis. When tumor exceeds the papillary layer then regional metastases is found and the life span falls progressively depending from the number of infiltrated lymph nodes. Our cases in certain stages agree with tatistics from different literature. Different authors present life span of 5 years from 20-33% depending on the number of lymph nodes involved. [3, 5, 9]

#### Conclusion

'Don't touch it', is often said to the suspicious spots. This is said by people and unfortunately by many doctors. This saying is very wrong, because the failure of melanoma always turns fatal and vice versa, earlier detection – the best prognosis. Melanoma is not the disastrous prognosis as we thought earlier. It always metastates firstly through lymphogene road, and later through hematogenous road. So the aim is that we should isolate it until it hasn't exceeded to lymph nodes. Even in cases of metastasation in lymph nodes, we should not give up from the treatment as there are not small chances of survival from five to ten years. [8, 9] But when metastasis is found, the prognosis is very bad indeed. Being inspired by literature, although with very few cases, we have certificated that with respect to Healing protocol for various stages of sickness, the chances for survival for the patients with melanoma are not at all small. Although in the small series of our patients, we see that the life span is similar as in literature.

### References

- 1. Christian Hasney, R. Brent Butcher II, and Ronald G. Amedee (2008) Malignant Melanoma of the Head and Neck: A Brief Review of Pathophysiology, Current Staging, and Management. The Ochsner Journal: Winter 2008, Vol. 8, No. 4, pp. 181-185.
- 2. Drepper H<sup>1</sup>, Köhler CO, Bastian B, Breuninger H, Bröcker EB, Göhl J, Groth W, Hermanek P, Hohenberger W, Lippold A, et al. Benefit of elective lymph node dissection in subgroups of melanoma patients. Results of a multicenter study of 3616 patients. Cancer. 1993 Aug 1;72(3):741-9.
- 3. Fisher SR. Elective, therapeutic, and delayed lymph node dissection for malignant melanoma of the head and neck: analysis of 1444 patients from 1970 to 1998. Laryngoscope. 2002 Jan;112(1):99-110.
- 4. Gordon MS, Chuang TY, Coleman JJ 3rd. Current therapy of cutaneous melanoma. Plast Reconstr Surg. 2001, 105: 1774-1799..
- 5. Grünhagen DJ<sup>1</sup>, Eggermont AM, van Geel AN, Graveland WJ, deWilt JH.Prognostic factors after cervical lymph node dissection for cutaneous melanoma metastases. Melanoma Res. 2005 Jun;15(3):179-84.
- 6. Lens, M. D., M. Dawes, T. Goodacre, and J. A. Newton-Bishop. Elective lymph node dissection in patients with melanoma: systematic review and meta-analysis of randomized controlled trials. *Arch Surg* 2002. 137:458–461.
- 7. Odom RB, James WD, Berger TG. Melanocytic nevi and neoplasms. In: James WD, Berger TG, Elston D (eds): Andrews' Diseases of the Skin. 9th ed. Philadelphia: WB Saunders, 2000, pp 881-889. Wagner JD
- 8. Paxton V. Dickson, MD and Jeffrey E. Gershenwald, MD, FACS:Staging and prognosis of cutaneous melanoma. Surg Oncol Clin N Am Jan 2011; 20(1): 1-17
- 9. Rebekah R. White, MD,\* Wilma E. Stanley, BS,† Jeffrey L. Johnson, MS,† Douglas S. Tyler, MD,\* and Hilliard F. Seigler, MD\* Long-term survival in 2,505patients melanoma with regional lymph nodes. Ann Surg. Jun 2002; 235(6): 879–887.

- 10. Singletary SE<sup>1</sup>, Shallenberger R, Guinee VF, McBride CM: Melanoma with metastasis to regional axillary or inguinal lymph nodes: prognostic factors and results of surgical treatment in 714 patients. South Med J. 1988 Jan;81(1):5-9.
- 11. Wells KE<sup>1</sup>, Rapaport DP, Cruse CW, Payne W, Albertini J, Berman C, Lyman GH, Reintgen DS. Sentinel lymph node biopsy in melanoma of the head and neck. Plast Reconstr Surg. 1997 Sep;100(3):591-4.