Local Control of Mucosal Malignant Melanoma After Combined Treatment (surgery and postoperative radiotherapy); A Case Presentation

KOMBİNE TEDAVİ (CERRAHİ VE POSTOPERATİF RADYOTERAPİ) SONRASI MUKOZAL MALİGN MELANOMDA LOKAL KONTROL; BİR OLGU SUNUMU

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Summary

A 60 year old male, Caucasian patient with a lesion on a palatum durum was registered in our clinic. Nasopharynx computerized tomogrophy revealed a lesion of 1.5 cm on the palatum durum. Afterwards patient was undergone resection of the lesion and left modified radical neck dissection in December 1997. Pathology was reported as malignant melanoma, tumor infiltrated nearby muscle and minor salivary glands. Depth of the tumor invasion was 8 mm, and surgical margins were 1 cm close to the specimen. Then patient was irradiated by 6 MV photon, 4 Gy/ daily fractions with a interval of three days in total of ten fractions. Local control still continued on last control in March 2001 though there appeared a metastatic nodule in the left lung. Only grade 1 xerostomia was observed as a complication.

Key Words: Malignant mucosal melanoma, Radiotherapy

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Özet

60 yaşında erkek hasta sert damakta bir kitle ile kliniğimize başvurdu. Nazofarenks tomografisinde sert damakta 1.5 cm'lik kitle mevcuttu. Aralık 97'de hastaya kitle eksizyonu ve sol boyun diseksiyonu operasyonu uygulandı. Patoloji komşu kas dokusuna ve minör tükürük bezlerine invaze, invazyon derinliği 8 mm olan, cerrahi sınıra 1 cm yakınlıkta malign melanom olarak rapor edildi. Hasta 6 MV fotonla 3 günde bir olmak üzere 4 Gy/günlük fraksiyon dozuyla toplam 10 fraksiyon ışınlandı. Mart 2001'deki son kontrolünde lokal kontrol devam ederken, akciğerde metastatik nodül tespit edildi. Morbidite olarak derece 1 kserostomi izlendi.

Anahtar Kelimeler: Mukozal malign melanoma, Radyoterapi

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In a review of the literature, Batsakis and associates found that 6-8% of all head and neck malignant melanomas were mucosal (1). Primary mucosal melanomas of the head and neck area comprise 2% to 8% of the cases seen yearly (1). Most are seen in fifth to seven decades of life (2). Males and females are equally affected (2). In oral cavity, as many as 80% of the melanoma arise in the hard palate (2). Trapp and colleagues offered a poor prognosis only for patients with more than 7 millimeter invasion (3). Lymph node involvement is a prognostic factor (3).

Although the incidence of malignant cutaneous melanoma has doubled each decade since the early 1960s, the mucous counterpart is still rare, representing 1.4% of all melanomas in Caucasian patients (4). Historically cutaneous melanoma has been characterized as radio-resistant, although recent observations regarding the radiobiological and clinical responses have prompted investigators to reevaluate the role of radiotherapy in localized mucosal melanoma. For this reason, we reported a patient with mucosal melanoma treated with postoperative radiotherapy in our institution.

Case

A 60 year old male, Caucasian patient with a lesion on a palatum durum was registered in our clinic. Nasopharynx computerized tomography (CT) revealed a lesion of 1.5 cm on the palatum durum (Figure 1). Afterwards patient has undergone resection of the lesion and left modified radical neck dissection in December 1997. Pathology was reported as malignant melanoma (spindle cell type), tumor infiltrated nearby muscle and minor salivary glands. Depth of the tumor invasion was 8 mm, and surgical margins were 1 cm close to the specimen. Then patient was irradiated by 6 MV photon, 4 Gy/ daily fractions with a interval of three days in total of ten fractions. Treatment portal included palatum durum and upper neck in both parallely opposed fields. After completion of radiotherapy, interferon α-2a (18 million I.U.) three times a week was applied by subcutaneous way. Patient was called for control for three monthly periods. Local control still continued on last control in March 2001 (Figure 2) though there appeared a metastatic nodule in the left lung. Only grade 1 xerostomia was observed as a late complication.

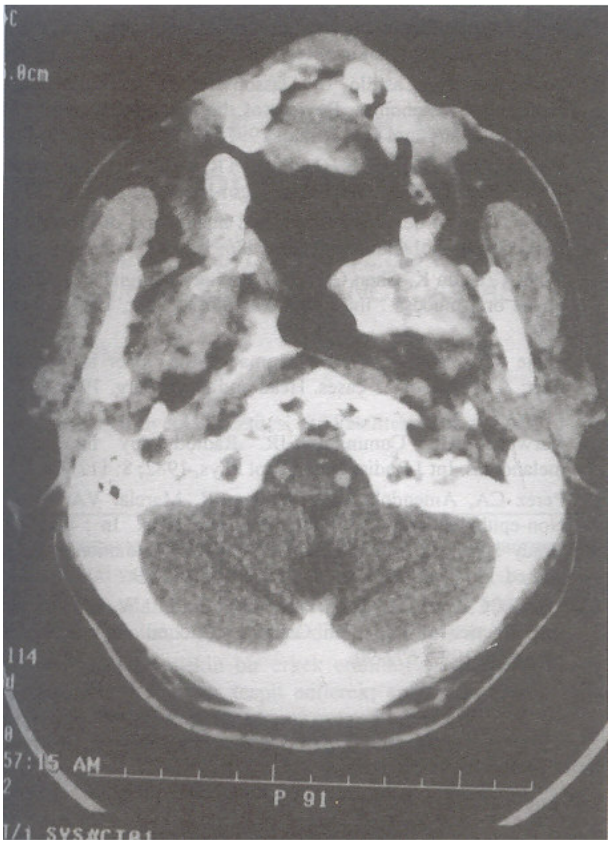

Figure 1. Computerized tomography image of the lesion on the hard plate before treatment.

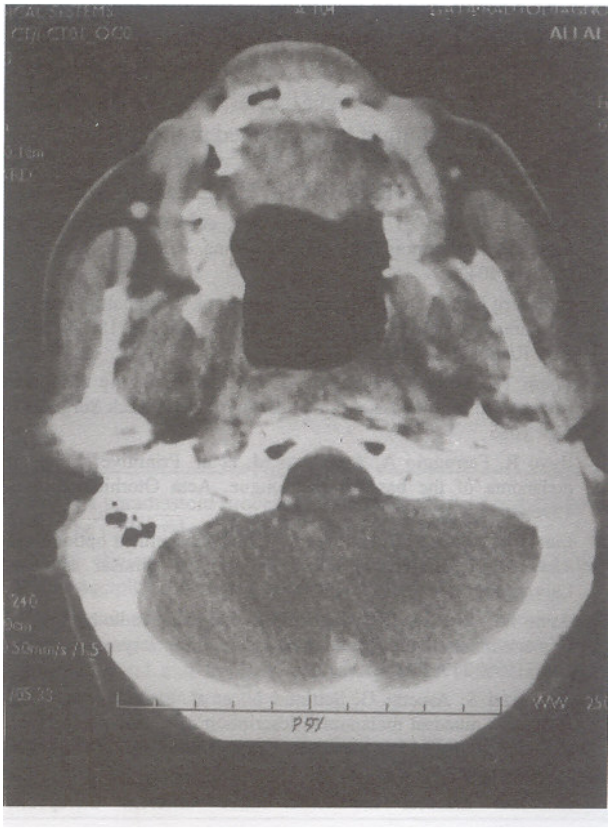

Figure 2. No evidence of the lesion on the last control.

Discussion

Malignant melanoma is proposed as radio-resistant. Lund et al reported data of 58 patients with mucosal malignant melanoma of the head and neck (5). They observed no difference on survival between the patients who had only surgery or radiotherapy added to surgery (5). In contrast, several reports proposed the benefit of adjuvant radiotherapy (6, 7, 8). Poissonet et al reported 12 cases of mucosal malignant melanoma of paranasal sinuses (9). They reported that the best results could be obtained with radiotherapy and sufficient excision of the tumor. Unfortunately 4-year survival was 26% in this study (9). Nandalpan et al. reviewed 259 patients with mucosal melanoma of the head and the neck. They reported that radiotherapy alone was ineffective to obtain local control though radical surgery with complementary radiotherapy yielded the best results (10). Snow and associates reported local failure rates of 40% to 60%, even with radical en bloc excisions (11). Ohya et al applied 2000-8900 cGy to oral cavity for mucosal melanoma (11). Five out of six patients were irradiated preoperatively, while remaining one was irradiated postoperatively. All of the cases in this serial had tumor control of 25 to 109 months (11). Panje et al treated five patients with a dose of 50 to 60 Gy postoperatively (12). Fraction doses were 150 and 200 cGy over a period of 5 to 6 weeks. But only one patient showed local control (12). In another study by Harwood et al., patients treated with 4 Gy or higher fraction doses showed better results (six of seven tumors were controlled) while only 5 of 18 treated with fractions lesser than 3.99 Gy were controlled (13).

Although distant metastases are the common death cause, local control must be obtained in several ways. As mentioned above en bloc resection is an efficient way for treatment, but results of irradiation are comparable to surgical series. So surgery can be saved for salvage. Furthermore, additional radiotherapy after surgery can improve local control. Especially usage of high fractional doses for mucosal melanoma revealed better control rates (14). In our case we used postoperative radiotherapy with a fraction of 4 Gy. This approach may be the reason for the long lasting local control that we observed. Xerostomia, loss of taste and dental carries may follow curative radiotherapy. Although complications are undesirable, we observed xerostomia in our case. But this kind of morbidity can be seen in doses greater than 50 Gy frequently (15).

As a result, for the treatment of mucosal melanoma of the head and neck, surgery and radiotherapy should be considered together. Although rarity of this disease makes it difficult to gather larger series, studies combining different modalities must be performed in the future.

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