



Case Report

A CASE OF SINO-NASAL MALIGNANT MELANOMA

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ABSTRACT

Mucosal melanomas are rare malignant neoplastic disease, that originates from melanocytes in mucosal tissue. It is a tumor mass of the nasal cavity or paranasal sinuses and most commonly originates from the nasal septum, nasal turbinates, or lateral wall and rarely occurs in the floor and roof of the nasal cavity. Most people with nasal cavity melanomas present with atypical nasal symptoms.

The authors demonstrate the clinical manifestation and the therapeutic process of a 65 y.o. patient with malignant melanoma in the sino-nasal region.

Key words: melanoma, nasal cavity, nasal malignancy, intracranial metastases

INTRODUCTION

Mucosal melanomas are rare malignant neoplastic disease, that originates from melanocytes in mucosal tissue.

The mucous membrane contains melanocytes with melanin pigment which are found in the basal layer of the epidermis, and in the eyes, that originate from the neural crest. Melanocytes in the nasal cavity can be found in the respiratory epithelium, in the nasal septum stroma, nasal glands, and the middle and inferior turbinates [1]. The first description of the sino-nasal malignant melanoma was done by Cove in 1869 [2].

The melanocytes originate from neuroectoderm, and mucosal melanomas are more common in tissues with ectodermal origin such as the nasal cavity mucosa, nasopharynx, larynx, tracheobronchial tree, and the esophagus [3].

The incidence of mucosal melanoma is 1.3%–1.4% of all melanomas and 25%–50% of them occur in the head and neck region [4]. It is a tumor mass of the nasal cavity or paranasal sinuses and most commonly originates from the nasal septum, nasal turbinates, or lateral wall and rarely occurs in the floor and roof of the nasal cavity. Most people with nasal cavity melanomas present with unilateral nasal obstruction and epistaxis. Pain, facial deformity, or impaired eye movement are less common and are indicative of advanced disease [5].

As opposed to the cutaneous form, exposure to sunlight is not an etiologic factor for mucosal melanoma development. It is discussed the presence of some carcinogenic factors in the air, such as formaldehyde and tobacco smoke but their potential role is still not clear. It has been found an interconnection between melanocytes hyperproduction and cigarette smoking of pigmented oral lesions [6].

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CASE

We report a rare case of malignant melanoma in the sino-nasal region in a 65 y.o. female. She presented at ENT Clinic in University Hospital of St. Zagora with unilateral difficulty nasal breathing six months ago and some episodes of spontaneous nosebleeds from the same nostril. The difficulty of nasal breathing quickly increased last few months.

Physical examination demonstrated a well-demarcated lesion in the right nasal cavity resembling nasal polyposis and without signs of nasal bleeding at the time of the examination. There were no palpable cranial or cervical lymph nodes. The blood test did not reveal any pathological changes.

During the surgical procedure, believed it is routine polypectomy, a soft tissue formation was excised and the bilateral nasal breathing recovered. Parts of the removed mass were routinely sent to a laboratory for pathohistological analysis and it was performed anterior nasal packing.

Unexpectedly, the histological examination of the biopsy revealed malignant melanoma. It was performed an immunohistochemical analysis, specifically for melanoma malignum – Melanin A and HMB-45 (melanoma cytoplasmic antigen), which confirm unequivocally the diagnosis (**Figure 1**).

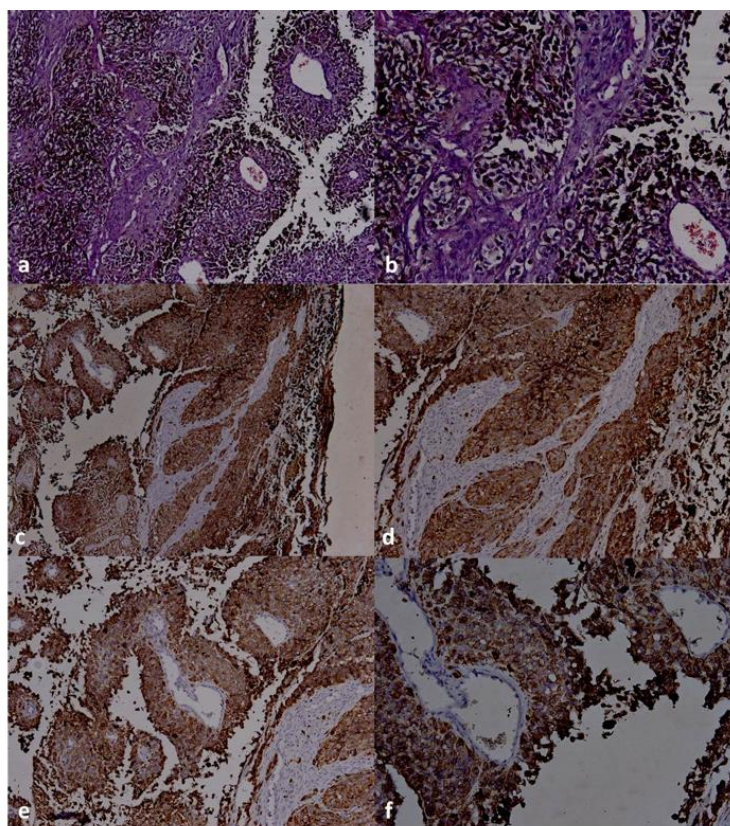


Figure 1. a) Hematoxylin-Eosin; a) Hematoxylin-Eosin; b) Immunohistochemistry-Melanin A
b) Immunohistochemistry-Melanin A; c) Immunohistochemistry-HMB45; c) Immunohistochemistry-HMB45

Forty-eight hours after surgery nasal package was removed and after dehospitalisation the patient was diverted toward Regional Oncologic Center for further chemotherapy /immunotherapy.

11 months later, the patient was admitted to a neurosurgery clinic at the University Hospital - St. Zagora due to left hemiparesis and symptoms of

increased intracranial pressure. A heterodense formation with dimensions 22.5x25.6 mm and 49 to 68 XE was found in the right parietal cortex, and a second oval formation (30.7x31.1 mm), suspected for metastatic lesion, was located in the supratentorial region (**Figure 2**). Craniotomy and extirpation of metastases were performed (**Figure 3**).

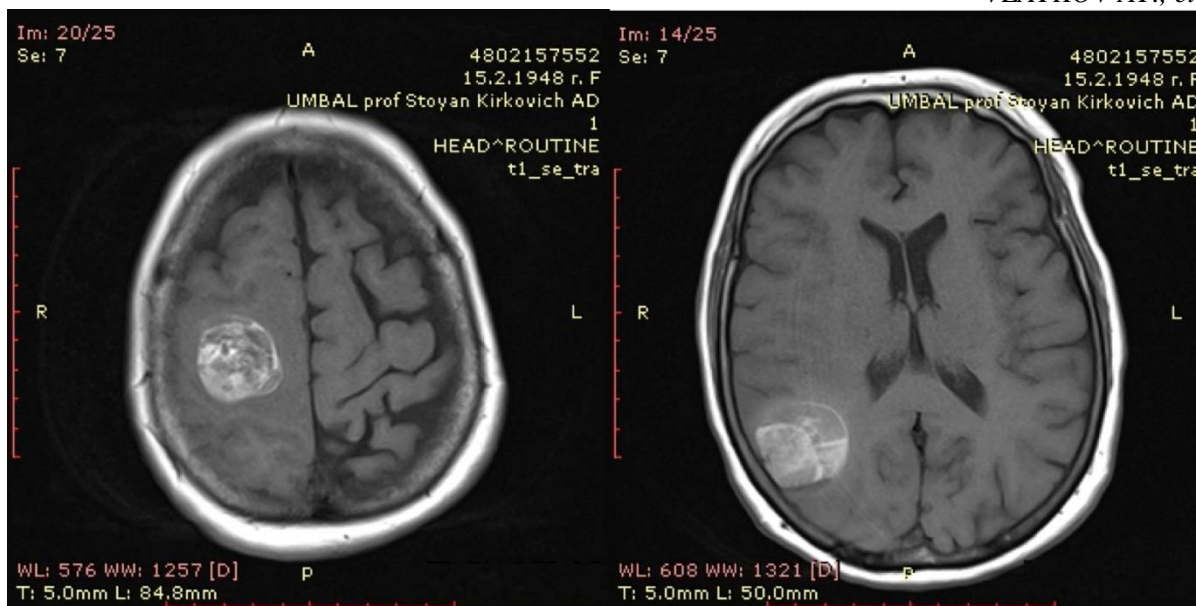


Figure 2. CT scan demonstrates brain metastases

At the follow-up examination 1 month after the surgery there were no neurological symptoms, no evidence of recurrence of the nasal cavity and skull. The patient did not appear for a second follow-up examination after 3 months.

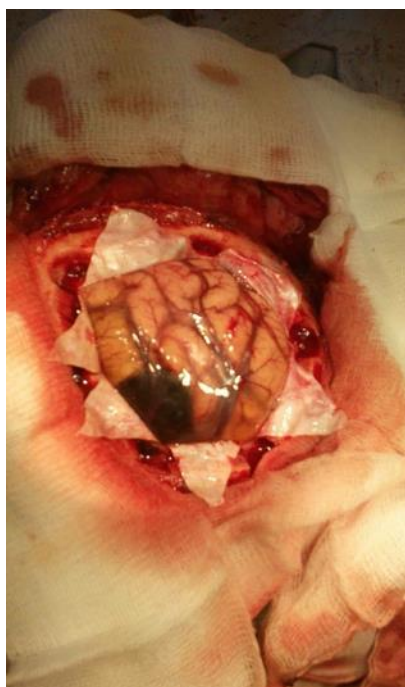


Figure 3. Craniotomy - parietal metastasis

DISCUSSION

Primary mucosal and sino-nasal malignant melanomas are unusual clinical occurrences. Because of their low frequency, they are poorly characterized and studied. Moreover, the absence of typical symptoms in the early stages or the presence of complaints mimicking this serious pathology is often the reason for the delayed diagnosis of sino-nasal melanomas.

The best way to get a positive outcome is early detection and radical surgical excision. However, despite aggressive therapy, the prognosis for people with sino-nasal melanomas is extremely poor. The failure of the topical treatment is the main problem in achieving the definitive treatment of patients.

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