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**Letters to the Editor****Multiple Skin Metastases of Amelanotic Melanoma that Originated from the Sinonasal Mucosa**

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*Sir,*

Primary sinonasal mucosal melanomas are uncommon, aggressive tumors. Similar to other malignancies, nasal melanomas frequently metastasize to the lymph nodes, lungs, liver and bone. However, skin metastases are very rare (1). We report here a patient with amelanotic melanoma originated from the sinonasal mucosa who developed multiple skin metastases rapidly and the diagnosis was confirmed by a skin biopsy.

**CASE REPORT**

A 41-year-old Japanese man was referred to our hospital with a sinonasal tumor, systemic lymphadenopathy and multiple subcutaneous nodules. He noticed that his right nostril had become obstructed 10 months before and had suffered repeated episodes of epistaxis a month before. Multiple subcutaneous nodules had appeared 2 months before and they had gradually enlarged and increased in number. Physical examination revealed approximately thirty asymptomatic subcutaneous nodules on his trunk (Fig. 1a). Diffuse lymphadenopathy was also noted. Magnetic resonance imaging demonstrated that a large mass occupied the right maxillary sinus and the nasal cavity (Fig. 1b). Computed tomography showed multiple lymphadenopathy throughout his whole body and metastatic tumors in the peritoneum and retroperitoneal regions.

In laboratory examinations, biochemical tests revealed high lactate dehydrogenase concentrations (512IU/l) and high 5-S-cysteinyl-dopa concentrations in the serum (144.3nmol/l). Skin biopsy specimens from the upper back showed nests of anaplastic tumor cells in the subcutaneous tissue. Immunohistochemically, the tumor was positive for S-100 and HMB45, although no melanin pigment was observed. The tumor cells only weakly stained for CD56, but were negative for cytokeratins and leukocyte common antigen (Fig. 2). No cutaneous lesion suggestive of primary malignant melanoma was found over the patient's entire body surface and

no remarkable history of skin lesions was obtained. From these findings, the diagnosis of amelanotic melanoma of sinonasal mucosal origin with multiple subcutaneous and lymph node metastases was finally made. Right inguinal lymph node biopsy specimens also revealed similar features to those of the subcutaneous nodule, which supported the diagnosis. The tumor was resistant to systemic chemotherapy, and the patient died after 10 weeks' hospitalization due to renal dysfunction caused by tumor invasion.

## DISCUSSION

Mucosal melanomas are rare, representing 1.3 % of all melanomas, of which 55 % were located within the head and neck regions (2). 33-67 % of these mucosal melanomas found in the head and neck region are amelanotic. This rate is higher than the rate of cutaneous amelanotic melanomas (1, 3, 4). Sinonasal melanoma rarely develops skin metastasis, and only one case was found in the literature in which the multiple skin metastasis occurred one year after initial resection operation of primary lesion (1, 5). The present case is unique in that cutaneous metastatic nodules appeared within several months after the patient had noticed nasal congestion, and these skin nodules increased rapidly in number. The definite diagnosis of amelanotic melanoma was made from the histopathological observation of the skin metastatic lesions. The present case suggests that we should bear in mind that sinonasal amelanotic melanoma is one of differential diagnoses for an aggressive tumor with multiple skin metastatic lesions.

## References

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**Figure Legends**

Figure 1. Clinical features. (a) Multiple subcutaneous nodules ranging from 0.5 cm to 1.5 cm in diameter on the trunk. (b) Magnetic resonance imaging of the sinuses demonstrated a large mass occupying the right maxillary sinus that had invaded into the nasal cavity.

Figure 2. Histopathological features of the subcutaneous nodule. (a) Dense proliferation of undifferentiated, small to medium sized, atypical cells in the nodule. (Hematoxylin and eosin). The tumor cells were positive for S-100 protein (b) and HMB45 (c) and were only weakly positive for CD56 (d) (original magnification x 40).



