Microvenular hemangioma (MVH) is an acquired, benign type of hemangioma that usually manifests itself as a solitary, slowly growing, red to violaceous, asymptomatic papule, plaque or nodule. It is typically located on the trunk or extremities of young adults. It can be difficult to differentiate MVH from other types of hemangioma and Kaposi sarcoma. Herein we report a case of MVH unusual for its location, age of onset, and morphologic features.

A 62-year-old man complained of an asymptomatic, bluish-red discoloration on the tip of his nose that had been present for two years. Dermatologic examination showed a violaceous patch 2 x 2 cm in diameter with indistinct borders. Incisional biopsy revealed irregularly branched small or medium-sized vascular spaces lined with benign endothelial cells, positive for CD34 and negative for HHV-8.

MVH is a rare lesion, and less than 70 cases have been published to date. A review of 40 reported cases revealed that 15% of MVH patients were over 40 years of age and only 3% of the cases showed macules or patches. A literature survey showed only two cases of MVH located on the facial region, one on the chin and the other on the cheek. Our case was unique for its location and interesting for other rarely encountered features. MVH should be considered in the differential diagnoses of vascular lesions on nasal skin.
Histologically, hyperkeratosis, irregular acanthosis, and minimal papillomatosis were observed in the epidermis. Small and medium-caliber, irregularly branched vessels, lined by a single layer of benign endothelial cells were distributed in the upper dermis. Between the blood vessels, increased fibrous tissue and sparse lymphoplasmacytic inflammatory infiltration were noticed (Figure 2 a, b). Immunohistochemically, the cells lining the lumina were positive for CD34 (Figure 3 a,b). HHV-8 immunostaining was negative for vascular lesions. Based on these findings, MVH was diagnosed.

Discussion

A review of 40 cases of MVH revealed that MVH mostly manifested itself with nodules, and less frequently with papules or plaques. Only a minority (3%) of the cases showed macules or patches [3].

MVH is typically located on the extremities and trunk and rarely the neck and face can be involved. The review men-
similarities between these entities have been reported [2,6-8]. HHV8 is an important clue that helps to distinguish MVH from early stages of KS, since KS expresses the marker, while MHV does not [9]. KS and some other vascular lesions were taken into account for the differential diagnosis of MVH and are listed in Table 1.

Our patient's histologic and immunohistochemical findings were diagnostic of MVH, while his clinical manifestation was unique in its localization. In addition, our case was interesting in that the onset of MVH was in advanced age and it presented with a patch type lesion. Our report adds MVH to the broad list of the lesions that could be located on the nose. MVH should be considered in the differential diagnoses of vascular lesions in this area.

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| Clinical Features / Course / Prognosis | Histopathological Features | MVH Differential Points |
|--------------------------------------|----------------------------|-------------------------|
| Cutaneous Angiosarcoma               | • Involve dermis extensively, sometimes with subcutis and fascia | • Absence of a pericyte layer |
|                                      | • Irregular, dissecting, anastomosing vascular channels | • a more disordered architecture |
|                                      | • Tumor cells pile up along vessel lumina                       | • Prominent cytologic atypia with large cells, hyperchromatic and pleomorphic nuclei |
|                                      | • Absence of a pericyte layer | • High mitotic activity |
| Kaposi Sarcoma                       | • Proliferation of spindle cells | More architectural complexity |
|                                      | • Prominent slit-like vascular spaces extravasated red blood cells | • Absence of conspicuous pericyte layer |
|                                      | • Perivascular lymphocytes and plasma cells | • Anastomosing vascular spaces |
|                                      | • Eosinophilic hyaline globules | • Ectatic vascular channels surrounding the normal blood vessels (promontory sign) |
|                                      | • More architectural complexity | • IHC: HHV-8 (+) |
| Hobnail Hemangioma (targetoid hemosiderotic hemangioma) | • Dilated superficial dermal vessels | Inflammation and fibrosis |
|                                      | • Plump, “hobnail” endothelial cells that protrude to lumina | Extravasated red blood cells |
|                                      | • Inflammation and fibrosis | Hemosiderin deposition |
|                                      | • Extravasated red blood cells | Lymphangiectases |
|                                      | • IHC: lymphatic markers (+); (D2-40) | IHC: lymphatic markers (+); (D2-40) |
| Tufted Angioma                       | • Tightly packed “tufted” capillaries in discrete lobules (cannonball appearance) | Distinctive nodular growth pattern |
|                                      | • Semilunar clefts at periphery of the lobules | • Semilunar clefts at periphery of the lobules |
|                                      | • IHC: lymphatic markers (+); (D2-40) | • IHC: lymphatic markers (+); (D2-40) |
| Pyogenic Granuloma                   | • Multiple lobules of closely packed capillaries | Well-developed collarette from elongated rete ridges |
|                                      | • Loose, edematous stroma | Fibrous connective tissue septae |
|                                      | • Mixed inflammatory infiltrate | |
|                                      | • IHC: lymphatic markers (+); (D2-40) | |
| Reactive Angioendotheliomatosis      | • Intravascular proliferation of endothelial cells | Fibrin thrombi |
|                                      | • Dilated vessels | Reactive (fasciitis-like) dermal alterations |
|                                      | • Mild atypia | |
|                                      | • Minimal inflammation | |

TABLE 1. Clinical Differentiation of MVH from Cutaneous Vascular Tumors
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