

Sebaceous Carcinoma and Basal Cell Epithelioma Developed in Organoid Nevus

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In about 20 to 30 percent of cases with organoid nevus (nevus sebaceus), benign and/or malignant tumors of the epidermis and adnexae may develop.

We describe a 71-year-old woman with sebaceous carcinoma and basal cell epithelioma developed in organoid nevus. (Ann Dermatol 11(1) 59~61, 1999).

Key Words : Organoid nevus, Sebaceous carcinoma, Basal cell epithelioma

Organoid nevus is usually present at birth as pebbly hairless lesions on the scalp or face.¹ In 1965, Mehregan and Pinkus² discussed the life history of organoid nevus: the early stage in infancy, papillomatous epithelial hyperplasia and underdeveloped hairs; the second stage at puberty, massive development of sebaceous glands, epidermal verrucous hyperplasia, and maturation of apocrine glands; the third stage, development of benign and malignant epithelial neoplasms. We describe an unusual case of sebaceous carcinoma and basal cell carcinoma developed in organoid nevus. The development of sebaceous carcinoma in organoid nevus has not been reported in the English literatures.

CASE REPORT

A 71-year-old Korean woman had a two-month history of a rapidly growing 2 × 3 cm sized, erythematous dome-shaped, oozing nodule arising in the pinkish hairless plaque on the left side of her scalp (Fig 1). The hairless plaque had been present since infancy and it had been considered as a birth mark. Recently she experienced intermittent

bleeding from the nodule. Two biopsy specimens from the nodule showed sebaceous carcinomas with many undifferentiated and sebaceous cells with foamy cytoplasm and atypical and pleomorphic nuclei. Many mitotic figures were noted (Fig 2). In the reticular dermis, several apocrine glands were seen (Fig 3). A biopsy specimen from the hairless pinkish plaque near the nodule showed basal cell epithelioma with anastomosing strands composed of palisading basaloid cells from the epidermis with retraction of the tumor cell strands from the surrounding stroma (Fig 4). All the specimens also showed dilated apocrine glands and syringoid eccrine glands in the reticular dermis, which were ascribed to underlying organoid nevus. Skull X-ray studies, a computed tomographic scan of the brain, and ^{99m}Tc bone scintigraphy revealed no evidence of metastasis. She underwent total excision of the lesion including the plaque and a free flap operation.

DISCUSSION

Benign and/or malignant tumors of the epidermis and adnexae arising in the organoid nevus include syringocystadenoma papilliferum, basal cell carcinoma, syringoma, infundibuloma, osteoma, apocrine cystadenoma, keratoacanthoma, nodular hidradenoma, sebaceous epithelioma, trichilemmoma, squamous cell carcinoma, apocrine carcinoma, adnexal carcinoma with pilar differentiation, porocarcinoma, and sebaceous carcinoma.^{1,3-5}

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Fig. 1. 2 × 3cm sized, erythematous, oozing, dome-shaped nodule on the hairless pinkish plaque on the left side of the scalp.

Fig. 2. Lobulated lesions with many undifferentiated and sebaceous cells showing atypical nuclei and mitotic figures (H & E, × 40). Inlet shows its higher power view (H & E, × 400).

Among these, only one case of sebaceous carcinoma has been reported and that was in the French literature.⁶

Usually carcinomas that arise in association with organoid nevus are considered as non-aggressive lesions.⁴ However, sudden growth of a nodular tumor within organoid nevus and a large developed nodule as in our patient are regarded to be an indication of

Fig. 3. Several apocrine glands were seen in the reticular dermis, which supports the fact that sebaceous carcinoma was arising from the underlying organoid nevus (H & E, × 200).

Fig. 4. Anastomosing strands of basaloid cells showing peripheral palisading pattern and retraction of tumor cell strands from the surrounding stroma (H & E, × 100).

aggressive behavior.² Fortunately, the studies we performed showed no evidence of metastasis.

Although there was a case with basal cell epithelioma, sebaceous epithelioma, syringocystadenoma papilliferum, and a trichilemmoma arising from an organoid nevus,¹ the fact that sebaceous carcinoma, which has never been reported in the English literature, and basal cell epithelioma developed in organoid nevus is interesting.

The treatment of choice of organoid nevus is complete removal because of the secondary neoplasms occurring in the late stage of organoid nevus as in our case.

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