Letter to the Editor

Desmoplastic trichilemmoma of the scalp

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Sir,

A 66 year-old male presented with a 2 cm verrucous, skin colored plaque on the scalp. Histologic examination revealed lobules of glycogenated epithelium with peripheral palisading and a prominent basement membrane. At the center of the lesion, cords of basaloid cells were noted within a dense sclerotic stroma. No atypical features were found in the neoplasm. Immunohistochemical studies were performed showing expression of CD34 in the tumor cells (Figs. 1-3).

Trichilemmoma was described first in 1962 as a benign clear cell tumor with an outer hair root sheath differentiation [1]. Subsequently Hunt and coworkers reported several cases characterized by irregular cords and epithelial cells nests entrapped in a desmoplastic stroma which they called desmoplastic trichilemmoma (DT) [2].

Worldwide, less than 100 DT cases have been published, with a frequency of around 0.003% among skin tumors [3]. DT is usually seen in individuals after their fifth decade of life, affecting most commonly the face; less frequent involved areas such as the scalp, neck, chest and vulva have also been reported [2,4]. While DT is a benign lesion, it can be associated with other tumors such as basal cell carcinoma [5].

Clinically, DT presents as a dome-shaped papule with a smooth or irregular surface. Oftentimes it presents with pearly borders, telangiectasis and superficial ulceration [6,7]. The combination of these features may obscure the initial clinical diagnosis resembling those seen in basal cell carcinoma, verruca vulgaris, sebaceous hyperplasia and squamous cell carcinoma [4].

Histologically, DT is a well-circumscribed lobular lesion. At the periphery, it presents features of trichilemmoma with lobules of glycogenated cells and

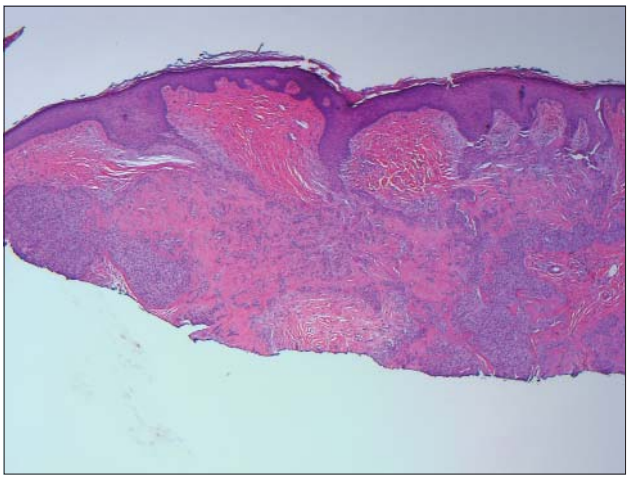

Figure 1: Lobules of glycogenated epithelium with peripheral palisading. At the center of the lesion, irregular cord and nests of basaloid cells in a dense sclerotic fibrocollagenous stroma are seen. HE 100X.

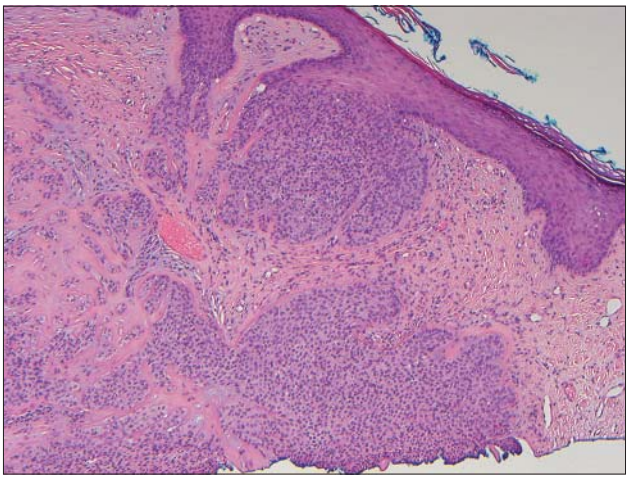

Figure 2: Higher power showing the transition between the lobules with trichilemal differentiation and the irregular cords within a desmoplastic stroma. Note the prominent basement membrane seen at the periphery of the tumor. HE 400X.

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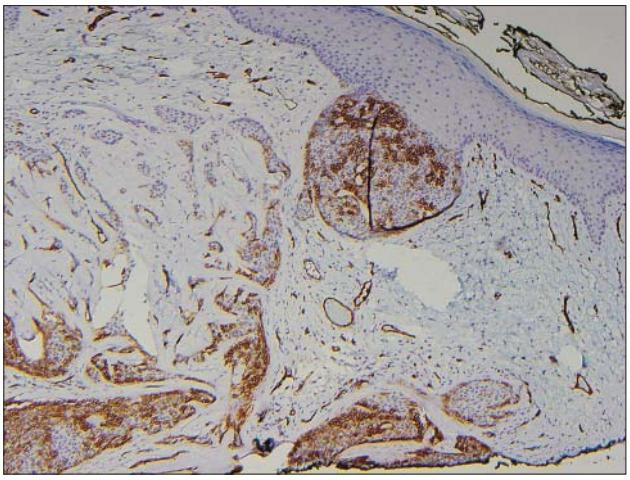

Figure 3: Expresion of CD 34 is observed in the tumor cells.

peripheral palisading, whereas the central part shows irregular cord and nests of basaloid cells in a dense sclerotic fibrocollagenous stroma [6,7]. Extension of the central part of the lesion into the dermis mimics invasion, however, cytological atypia is not usually seen [8]. CD34 is a useful marker which is expressed in DT but not in other neoplasms such as basal cell carcinoma or squamous cell carcinoma [9].

Due to the uncertain behavior of the tumor and the association with other malignant neoplasias, reexcision to ensure complete removal of the lesion is usually recommended. Mohs micrographic surgery has been reported and advocated by some authors as a technique that gives histological control of the margins with maximal preservation of the surrounding tissue [6,7].

Consent

The examination of the patient was conducted according to the Declaration of Helsinki principles.

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