

Case 11

A 26 years old Thai man.

Chief complaint:

Solitary skin-colored lesion on the right cheek for 10 years.

Present illness :

He has had solitary, asymptomatic, slow growing, skin-colored lesion on his right cheek for ten years. It was sometimes associated with mild pruritus.

Past history:

His general health is good.

Family history: Nil

Physical examination:

GA: A healthy Thai young man.
HEENT: Not pale, no jaundice.
LN: Not palpable
Heart and Lung: Normal
Abdomen: Normal
Skin: Solitary 0.5 cm., skin-colored, firm, annular plaque with raised border on the right cheek.

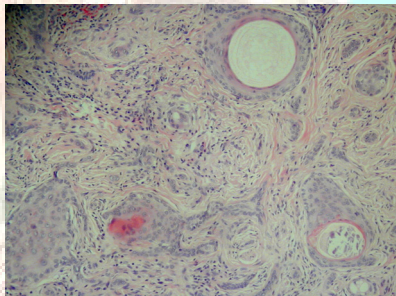


Fig 11.1

Fig 11.2

Histopathology(S- 047551)

There are multiple nests, cords, strands and cystic aggregation of cuboidal cells in the fibrous stroma, some of which tend to form follicular structure.

Diagnosis: Desmoplastic trichoepithelioma

Presenter: Wipawee Wittayawanitchai

Consultant: Parichart Chalidapongse

Natta Rajatanavin

Comment:

Desmoplastic trichoepithelioma (DTE) is a benign adnexal tumor of hair follicle origin that usually present as an asymptomatic, firm, annular plaque. It most commonly occurs in sun-exposed areas, especially on the face. Patients typically give a history of slow-growing lesion that has been present for several years. The lesions are relatively small (<2cm.). Although the most common presentation is a plaque, desmoplastic trichoepithelioma has also been observed as aggregate annular lesions with a ring of papules in the periphery. Clinically, it resembled granuloma annulare, sebaceous hyperplasia, basal cell carcinoma, conventional trichoepithelioma.

The diagnosis of desmoplastic trichoepithelioma can be made when a triad of microscopic findings are observed,

1. narrow strand of tumor cells
2. keratinous cyst
3. desmoplastic stroma in combination with a compatible clinical picture.

The tumor strands usually consist of one to three cells thick and are composed of small basaloid cells with prominent oval nuclei and scant cytoplasm.

Microcystic adnexal carcinoma and morphea form basal cell carcinoma can mimic desmoplastic trichoepithelioma. However, microcystic adnexal carcinoma contains variable of ductal structures and tends to invade deeply. Of value in ruling out basal cell carcinoma ,desmoplastic tricoepithelioma are the absence of mitosis, individual cell necrosis,and mucinous stroma.

There are some immunohistochemical markers that help to distinguished DTE from morphea form BCC. Epithelial membrane antigen (EMA) is positive in 75% of cases of DTE. In contrast, BCC is typically negative.

Antibodies against matrix metalloproteinase stromelysin-3 (ST3) protein were found in fibroblast surrounding morphea like BCC cells in 34(58%) of 50 reported cases. However, none of of 12 cases of DTE expression of ST-3 was found in fibroblasts.

Desmoplastic trichoepithelioma is a benign lesion and does not have to be treated. However, many patients opt for treatment because of cosmetic concerns.

Reference

1. Jeannine L.Koay et al. Asymptomatic annular plaque of the chin. Arch Dermatol. 2002;138(8): 1091-6.
2. Andrew J. West , Steven J. Hunt et al.Solitary facial plaque of long duration. Arch Dermatol. 1995;131(2):233.
3. Devid Elder, Rosalie Elenitsas, and BruceD. Rugs dale. Lever 's Histopathology of skin. 8th edn. 1997;31:755-6.
4. Acherman.AB et al. Neoplasms with follicular differentiation. New York Ardor scribendi. 2001.
5. Wick MR, Cooper PH, Swanson PE,kaye VN ,Sun TT. Microcystic adnexal carcinoma.Animmunohistochemical comparison with other cutaneous appendage tumor. Arch Dermatol.1990;126(2):189-94
6. Yamamoto O, Hamada T, Doi Y, Hashimoto H. Immunohistochemical and ultrastructural observation of desmoplastic trichoepithelioma with a special reference to a morphological comparison with normal apocrine acrosynergium. J Cutan Pathol.2002;29(1):15-26.

Ramathibodi
Hospital
Interhospital
Dermatology
Conference

August 6, 2547

August 6, 2547