DOI: 10.3315/jdcr.2011.1065

Journal of Dermatological Case Reports

PHOTOLETTER TO THE EDITOR

Cutaneous myxoid fibroblastoma

Gokhan Okan[1], *Cuyan Demirkesen*[2]

1. Department of Dermatology, Medical Park Bahcelievler Hospital, Istanbul, Turkey.
2. Department of Pathology, Istanbul University, Istanbul, Turkey.

Corresponding author: Gokhan Okan, MD, Medical Park Bahcelievler Hospital, Kultur Sokak No:1 Bahcelievler-Istanbul, Turkey. E-mail: *gokhanokan8@hotmail.com*

Abstract

Cutaneous myxoid fibroblastoma is an extremely rare soft tissue tumor, diagnosed based on histopathology. The histopathological triad for the diagnosis of the disease includes 1) spindle-shaped and/or stellate cells with elongated nuclei and eosinophilic cytoplasm 2) distribution of cell in a myxoid stroma containing very few collagen fibers 3) cellular atypia without marked nuclear polymorphism in some cells. To date, only single cases of this disease have been reported. We report a new case and discuss the disease.

Key words:

dermatopathology, cutaneous myxoid fibroblastoma, tumor

Cutaneous myxoid fibroblastoma (CMF) is a very rare entity described for the first time by Rieger in 1992.[1] It is an obscure soft tissue tumor. The characteristic histological findings enable establishing the correct diagnosis of a CMF as well as ruling out other cutaneous myxoid lesions. The histopathological triad for the diagnosis of the disease includes 1) spindle-shaped and/or stellate cells with elongated nuclei and eosinophilic cytoplasm 2) distribution of cell in a myxoid stroma containing very few collagen fibers 3) cellular atypia without marked nuclear polymorphism in some cells.[1,2] To date, only two cases of CMF have been reported. We report a new case and discuss the disease.

A 57-year-old man presented with a 6 months history of nonpainful a slowly growing nodule on his upper left arm. His past medical history was unremarkable. Physical examination revealed firm 0.8 mm nodule on the upper left arm. Because of discomfort the patient felt in the area, the lesion was excised. Histopathological examination revealed a well-circumscribed nodule involving the papillary dermis. The overlying epidermis showed no ulceration and had normal thickness (Fig. 1). The nodule consisted of uniform

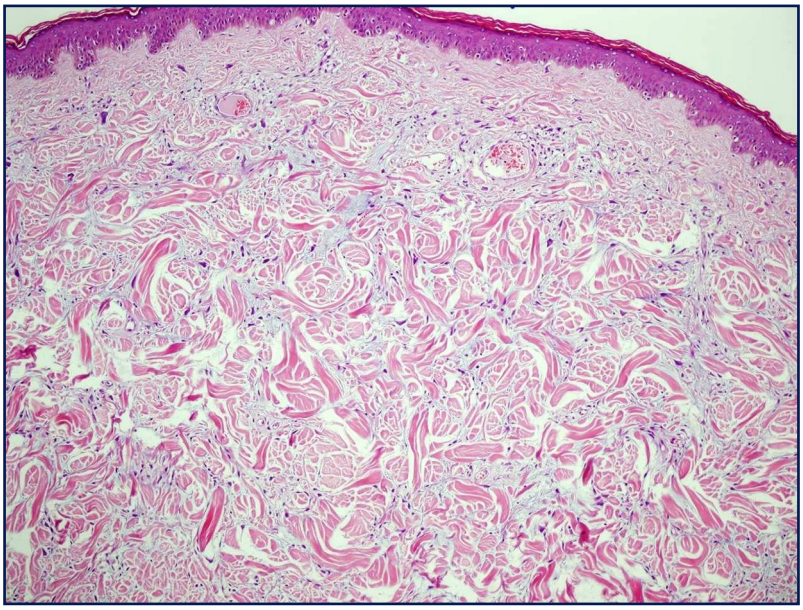

Figure 1
Fibroblastic cells in a myxoid stroma (HE X100).

spindle-shaped cells with elongated nuclei and eosinophilic cytoplasm. Those cells were distributed in a myxoid matrix (Fig. 2). Some of those cells revealed hyperchromatic nuclei but there was no nuclear pleomorphism or atypical mitoses. These findings were diagnostic of CMF. No recurrence has been experienced twelve months after surgery.

Rieger *et al*[1] reported a case of CMF in a young woman with a dome-shaped skin tumor on the popliteal fossa that clinically looked like hemangioma. After surgery no recurrence was observed within 30 months of observation. Lo *et al* have reported a case of CMF in a young man on the nose.[2] In our case the location of the tumor was the extremity, as in the case of Rieger *et al*.[1] Our patient is older than the other cases.

The differential diagnostic entities of CMF include cutaneous myxoma, focal cutaneus mucinosis and superficial angiomyxoma. Small numbers of spindle cells in a myxoid matrix and no nuclear polymorphism are diagnostic criteria for the myxoma.[3] Cutaneous focal mucinosis does not show a prominent spindle fascicular component in a abundant mucin pool.[4] Superficial angiomyxoma is composed of bland fibroblasts and elongated thin-walled vessels within a copious myxoid matrix.[5] Based on pathological features, our patient fulfills criteria for the CMF.

According to our literature search, this is the third published case of CMF. Cutaneous myxoid fibroblastoma is an extremely rare tumor with apparently good prognosis. To be able to diagnose the disease, the pathologist should be aware of the characteristic spindle-shaped cells distributed in a myxoid stroma, some of them with cellular atypia.

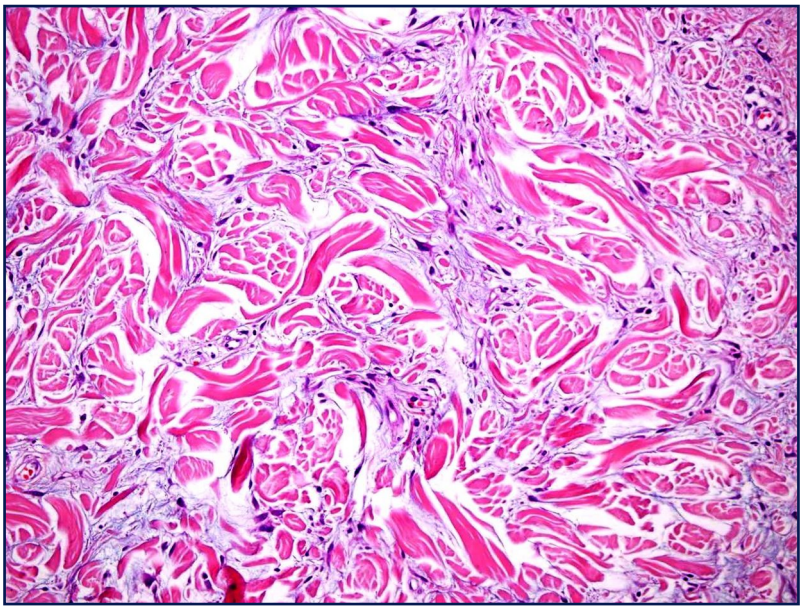

Figure 2

Bizarre, satellite shaped fibroblasts in a myxoid stroma (HE X200).

References

1. Rieger E, Soyer HP, Auboeck L, Kerl H. Cutaneous myxoid fibroblastoma. A histological, immunohistochemical and ultrastructural study. *Am J Dermatopathol*. 1992; 14: 536-541. PMID: 1335215
2. Lo LK, Hsiao CH, Chen YF, Hung CM, Tsai TF. Cutaneous myxoid fibroblastoma. *J Am Acad Dermatol*. 2008; 59: S61-64. PMID: 18625395
3. Hill TL, Jones BE, Park KH. Myxoma of the skin of a finger. *J Am Acad Dermatol*. 1990; 22: 343-345. PMID: 2303591
4. Wilk M, Schmoeckel C. Cutaneous focal mucinosis - a histopathological and immunohistochemical analysis of 11 cases. *J Cutan Pathol*. 1994; 21: 446-452. PMID: 7532654
5. Allen PW. Myxoma is not a single entity: a review of the concept of myxoma. *Ann Diagn Pathol*. 2000; 4: 99-123. PMID: 10760324