Multiple Dermatofibromas in an Adult Female

M Chen, D Sarma

Citation

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Abstract

Dermatofibroma, a common acquired tumor in women, most often occurs as a solitary lesion and less frequently as multiple lesions. Multiple dermatofibromas usually occur in patients of autoimmune diseases or altered immune states, and differ from the sporadic cases by the fibrohistiocytic proliferation with a storiform pattern extending into the deep dermis and subcutaneous tissues.

SOURCE OF SUPPORT

None

CASE REPORT

A 34-year-old woman noticed multiple slow-growing painful and itching nodules on her face (1 lesion) and extremities, particularly the lower leg (1 on arm and 5 on both legs). Clinical examination showed several tender, firm, slightly raised purplish nodules, ranging from 0.5 to 1 cm in diameter. There was no other systemic disease or any evidence of immunodeficiency. The patient underwent excisional biopsies of the lesions.

Gross examination showed slight dimples in the center of some of the biopsy specimens. Microscopically (Figures 1 & 2), the overlying epidermis is acanthotic, with focal pseudoepitheliomatous hyperplasia and basaloid proliferation. The bulk of the tumors is non-capsulated and located within the dermis. Whorling fascicles of a spindle cell proliferation with excessive collagen deposition are prominent. At the periphery, the spindle cells wrap around normal collagen bundles. The subcutis is not involved.

Figure 1

Figure 1: Skin, Dermatofibroma (2x)

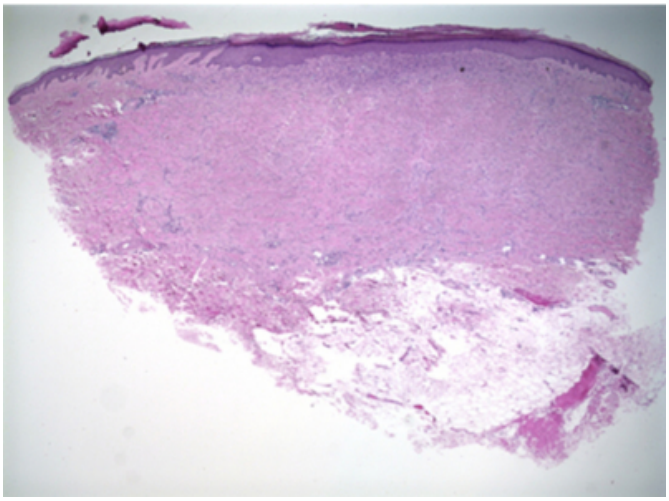
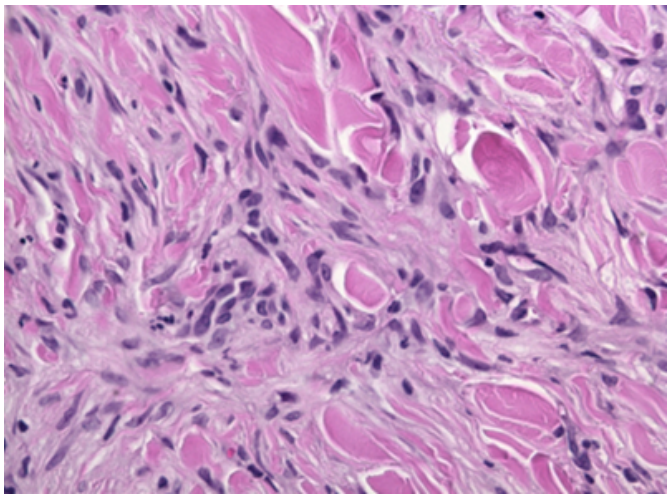


Figure 2

Figure 2: Dermatofibroma, higher magnification (40x)



COMMENT

Many authors have defined “multiple dermatofibromas” as the presence of at least 15 lesions. However, this criterion is arbitrarily chosen. Besides the number of lesions, multiple dermatofibromas differ from the sporadic cases by the histopathological finding, such as fibrohistiocytic proliferation with a storiform pattern extending into the deep dermis and subcutaneous tissues [1].

Although the etiology is unknown, multiple dermatofibromas may be associated with autoimmune diseases or altered immune states, such as, in patients with HIV infection [2], lupus [1], chronic myelogenous leukemia [3], or organ transplant [4].

Thus, when seeing a patient with multiple dermatofibromas, beside of making a simple diagnosis, one should always keep in mind to rule out the underlying systemic diseases or possibility of immunodeficiency of the patient.

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