Indian Journal of Dermatology

CORRESPONDENCE
Year : 2018 | **Volume** : 63 | **Issue** : 5 | **Page** : 439--440

Dermatofibrosarcoma protuberans secondary to a decorative tattoo: An Isotattootopic Response?

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How to cite this article:
Lastrucci I, Gunnella S, Pileri A, Maio V, Grandi V. Dermatofibrosarcoma protuberans secondary to a decorative tattoo: An Isotattootopic Response?.Indian J Dermatol 2018;63:439-440

How to cite this URL:
Lastrucci I, Gunnella S, Pileri A, Maio V, Grandi V. Dermatofibrosarcoma protuberans secondary to a decorative tattoo: An Isotattootopic Response?. Indian J Dermatol [serial online] 2018 [cited 2020 Sep 10];63:439-440
Available from: http://www.e-ijd.org/text.asp?2018/63/5/439/240099

Full Text

Sir,

A 37-year-old female presented with a firm skin-colored oval nodule arising on a tattoo on the left thigh. The lesion appeared 1 year earlier, about 5 years after she was tattooed and presented as a small nodule that has grown very slowly over time [Figure 1]. The past medical history was unremarkable.{Figure 1}

A 5 mm punch biopsy was taken and histology showed a monotonous infiltrate consisting of fusiform cells in a fasciculate/storiform pattern with mild morphologic atypia [Figure 2]a, [Figure 2]b, involving the dermis and subcutaneous fat, sparing the epidermis. Immunohistochemistry staining for CD34 was positive [Figure 2]c. Based on the clinical, histological, and immunophenotypic data, a diagnosis of dermatofibrosarcoma protuberans (DFSP) was made. The neoplasm was completely excised with Mohs' micrographic surgery and the patient underwent staging procedures (complete blood examination, including lactate dehydrogenase and a whole-body computed tomography scan) to rule out any visceral involvement. After 24 months of follow-up, the patient was in complete remission.{Figure 2}

DFSP is a rare, locally invasive malignant tumor with a fibroblastic differentiation and an infrequent propensity to metastatic spread.[1] It usually appears as a slow-growing, skin-colored to violaceous

single lesion involving an extremity,[1] consisting of a proliferation of CD34-positive spindle cells with a storiform/fascicular pattern involving the dermis and the subcutis.[2]

The European guidelines[1] suggest that DFSP should be surgically excised with a lateral margin of 3 cm in width. Mohs' micrographic surgery has been recommended because it has low rate of local recurrence.[1] Radiotherapy is rarely used, as second-line treatment in multiple relapsing disease or in inoperable masses.

DFSP has been reported to be related to chronic scars due to different type of local trauma. It has been hypothesized that the presence of a scar may be considered as a vulnerable site, in which may develop an opportunistic infection, tumor, or dysimmune reaction.[3] As observed in our case, DFSP should be included within the spectrum of possible tattoo-related conditions. As previously reported in the literature, we can speculate as to whether the tattooed area, owing to the presence of tattoo pigment, should be considered as an area of a chronic minor trauma,[4],[5] and thus, follow-up of tattooed patient as well as cutaneous biopsy of lesion within a decorative tattoo should be recommended.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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