

## LETTER TO THE EDITOR

## The Diagnostic Significance of Infiltration Pattern and Perilesional Lymphoid Cell Infiltrate in Dermatofibroma

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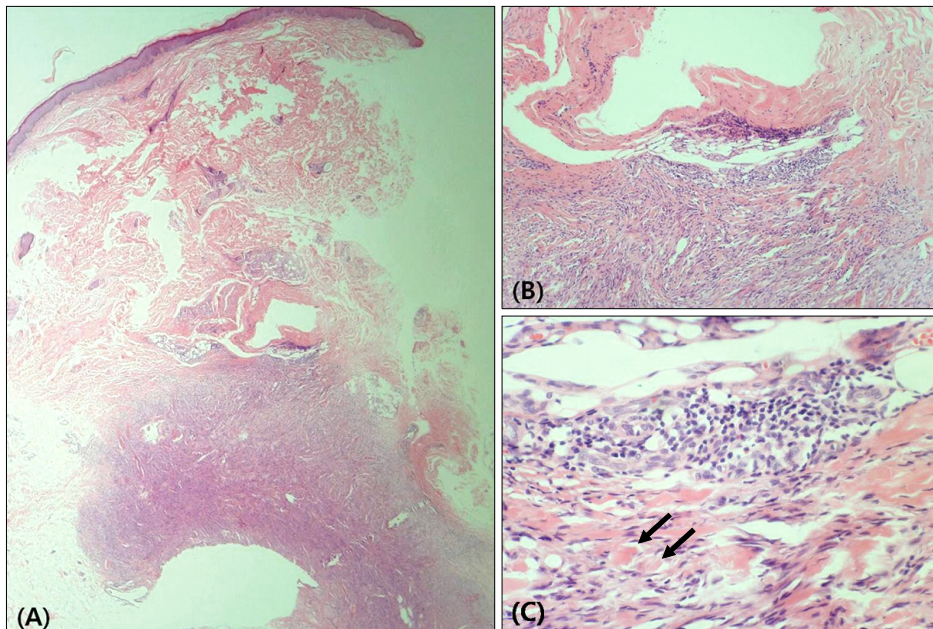
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Dear Editor:

We read, with great interest, the manuscript by Han et al.<sup>1</sup>, entitled "A clinical and histopathological study of 122 cases of dermatofibroma (benign fibrous histiocytoma)". We completely agree with the histopathological classification of dermatofibroma (DF) and are grateful for the educational figures. In their study, the authors describe the presence of lymphoid follicles, according to the classification of DF. Furthermore, we would like to suggest

different histopathologic findings important to the diagnosis of DF. Here, we refer specifically to subcutaneous DF, and we believe it should be clearly differentiated from other diseases.

Subcutaneous DF is a rare variant of DF and may be difficult to diagnose due to its histopathological similarities with dermatofibrosarcoma protuberans (DFSP) and atypical fibroxanthoma. The most useful histopathologic feature in this differential is a pattern of extension into the



**Fig. 1.** (A) A well-circumscribed nodule deeply localized into the subcutaneous tissue (H&E,  $\times 40$ ). (B, C) Scattered collections of lymphocytes and sclerotic collagen (arrows) at the periphery of the tumor (H&E, B:  $\times 100$ , C:  $\times 400$ ).

Received July 18, 2011, Revised August 4, 2011, Accepted for publication August 4, 2011

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subcutaneous tissue. In addition to smooth, well defined patterns, radial or vertical-with-wedge-shaped patterns have been observed as common patterns of infiltration in subcutaneous DF<sup>2</sup>. In a study by Gleason and Fletcher<sup>3</sup>, on clinicopathological assessment of deep benign fibrous histiocytoma, the focal perilesional lymphoid infiltrate, often with follicle formation, and peripheral hyalized collagen were observed as relatively common histopathological findings in subcutaneous DF, in contrast with those of DFSP. These results are in accordance with criteria published in 1994 by Zelger et al.<sup>4</sup> to discriminate subcutaneous DF from DFSP. Lymphoid follicles in particular have been reported in a variety of subcutaneous inflammatory diseases, including lupus panniculitis, morphea, erythema induratum, and necrobiosis lipoidica<sup>5</sup>. They are also observed in malignant tumors such as desmoplastic melanoma and leiomyoma<sup>6</sup>. We also observed a case of deep penetrating DF showing perilesional lymphoid follicles (Fig. 1). In conclusion, histopathologic findings, such as perilesional lymphoid follicle and hyalized collagen, were not specific to the recognition of subcutaneous DF, yet we believe they have diagnostic significance in the differential diagnosis between DF and DFSP.

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