Is Hyperplasia of Dendrocytes a Specific Feature of Histiocytoma cutis?

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Dear Sir,

We read with interest the rapid communication by Arrese Estrada and Piérard entitled 'factor-XIIIa-positive dendrocytes and the dermal microvascular unit' [1]. The authors labelled a variety of benign and malignant skin conditions with factor XIIIa (F-XIIIa) and proposed that positive cells may be resident perivascular phagocytic cells. This observation confirms our original suggestion that these cells were indeed phagocytic [1]. Moreover, our work on dermatofibroma [2] and fibrous papules of the nose [3] demonstrates that the histogenesis of these skin lesions is probably different from most other fibrocollagen-ous conditions such as scar and keloid.

Furthermore, the intense positivity observed in dermatofibroma can be useful in distinguishing this lesion from negatively labelled dermatofibrosarcoma [2]. Since then, one of us [R.C.] in collaboration with Headington and colleagues has characterized F-XIIIa-positive dermal dendritic cells in normal neonatal and adult skin [4] by employing double immunofluorescence techniques together with a large panel of mononuclear cell markers. Our findings indicate that these cells may represent a specific population of bone-marrow-derived dermal dendritic cells, distinct from Langer-

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hans cells, that indeed share some epitopes with mononuclear phagocytes (monocytes/macrophages). In addition, the detection of HLA-DQ on 48% of F-XIIIa-positive cells and the lack of OKM1 in combination with high OKM5 expression suggests an antigen-presenting cell phenotype. Parallel studies by Sontheimer et al. [5, 6] have independently identified this cell population using class II antigens introducing the term perivascular dendritic macrophage. A recent communication has confirmed that most of these cells are F-XIIIa-positive [Sontheimer, pers. commun.].

We agree, therefore, with the proposals of Arrese Estrada and Piérard that in normal skin these cells are resident phagocytic cells and, furthermore, it is not surprising that there should be a modest increase in such cells in many inflammatory, non-inflammatory, fibrohistiocytic and granulomatous dermatoses [7].

We cannot agree with Arrese Estrada and Piérard that the hyperplasia of dendrocytes is not a specific feature of histiocytoma cutis. Unlike inflammatory and non-inflammatory skin conditions, F-XIIIa labelling is observed in the majority of cells that comprise dermatofibroma, especially at the periphery of early lesions with maximum immunoreactivity adjacent to the dermal papillae. This consistent labelling pattern differs from that found in most other

dermatoses [7]. This does not conflict with the view that histiocytomas are not true neoplasms but represent a reactive process.

We suggest that in histiocytoma the dermal resident cells proliferate, probably as a result of an inappropriate local cytokine release after minor injury. Clearly, further in vivo and in vitro studies are necessary to determine the precise function of dermal dendrocytes, including their role in phagocytosis and collagen synthesis.

To conclude, we feel that the term 'dermal dendrocytoma' has the merit of reflecting the histogenesis of this common lesion.

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In Reply

Sir,

We thank Drs. Cerio and Wilson Jones for the interest they took in our work [1]. Their multiple contributions to our knowledge of dendrocytes are indeed outstanding. Our experience in this field confirms most of their data. There are however some controversies between their and our findings.

On the one hand, we have seen a number of dendrocytes at the site of scars by the 7th to 10th day after a wound. These cells were more abundant at the periphery and in the deep portion of the scar [2]. Such a feature is also seen at the active edge of morphea and lichen sclerosus et atrophicus [2]. The finding of dendrocytes in a fibrotic or sclerotic process is therefore in our opinion not specific for dermatofibromas.

On the other hand, factor-XIIIa-positive cells appear to be the prominent cells in a variety of diseases including reticulohistiocytoma [2], connective tissue nevi of the adventitial type [2, 3] and Kaposi sarcoma [1]. They also represent the major or even the unique cell type of the stroma in a series of neoplasms including most vascular tumors, malignant melanomas, basal cell carcinomas [4] and fibroepithelial tumors of Pinkus.

Should we then restrict the term 'dermal dendrocytoma' only to dermatofibromas? In our opinion this would mask a broader concept where dendrocytes could be considered as a cell of the microvascular unit that accumulates in many skin disorders.

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Photochemotherapy plus Squaric Acid Dibutylester in Alopecia areata Treatment

Sir,

The treatment in the extensive and long-lasting forms of alopecia areata is often frustrating. The association of more therapies for alope-