Fibrous papule of the face, clear cell type: a case report

Editor

Fibrous papule of the face (FPF) is a benign lesion commonly located on the lower nose in middle-aged adults. It appears as a solitary, skin-coloured or erythematous, dome-shaped papule, and measuring 3–5 mm in diameter. Histologically, it is an angiofibroma and spindle or stellate cells are scattered throughout the lesion. Two unusual variants have been reported, namely, FPF with granular cells and with clear fibrocytes. We report here a case of FPF, clear cell type, in a middle-aged Korean man.

This 57-year-old man presented with a 1-month history of an erythematous papule on the nose. Previously it was treated with intralesional triamcinolone injection once, but there was no improvement. Physical examination revealed a solitary, 5-mm-sized, relatively well-demarcated, erythematous papule on the nose (fig. 1). His past medical history and family history were insignificant.

A punch biopsy was done for both diagnostic and therapeutic purposes. Microscopic examination (fig. 2) revealed hyperkeratosis, parakeratosis and epidermal acanthosis overlying a localized area of fibrosis in the upper dermis. The lesion exhibited dermal collection of monomorphous clear cells. Nuclei were centrally located and the cytoplasm was vacuolated. Staining with S-100, periodic acid–Schiff (PAS) and epithelial membrane antigen (EMA) was negative whereas staining with CD 68 and vimentin was positive. On the basis of the clinical and microscopic findings, a diagnosis of FPF, clear cell type was made. The treatment result was satisfactory at the 3-week follow-up evaluation.

The histogenesis of FPF has been controversial. At first, it was regarded as involuting melanocytic naevus, based on increased melanocytes in the basal layer overlying both types of lesions and similar appearance between stellate cells of FPF and kite-shaped cells of Spitz naevus. But later, it was proposed that FPF was of fibroblast lineage rather than melanocyte. This was supported by the fact that no melanosome, premelanosome or desmosome was detected by electron microscopy and the spindle and stellate cells showed positive expression of Factor XIIIa, and negative of S-100.

There are two unusual variants of fibrous papule. The stromal cells may contain coarse cytoplasmic granules. Another rare pattern involves numerous fibroblasts and histiocytes with clear vacuolated cytoplasm in a hyalinized stroma. In our case, an erythematous papule on the nose in a middle-aged individual is somewhat typical for FPF, and on histologic examination the lesion was found to be composed of clear vacuolated cells aggregated in the dermis. Like in Soyer’s series’ stains of clear cells for S-100 and EMA were negative ruling out melanocytic and epithelial origins, whereas vimentin and CD68 were positive supporting a mesenchymal origin. Therefore, we diagnosed him as FPF, clear cell type.

The aetiology of the clear cytoplasm is unknown. Perhaps this represents a reaction to trauma in an otherwise
normal fibrous papule. In our case, the patient touched the lesion frequently and the specimen showed compact hyperkeratosis and parakeratosis, and which indicate prior irritation. Most recently, it was suggested that diffuse positivity with NKI/C3 may indicate an abnormality in lysosomes. Further ultrastructural studies might be needed to elucidate the aetiology.

Clear cell fibrous papule should be differentiated from clear cell dermatofibroma or other clear cell neoplasm including balloon cell naevus, xanthoma, sebaceous carcinoma, renal cell carcinoma, chordoma and chondroma. FPF, clear cell type can be distinguished from these by excluding epithelial and melanocytic lineage through the proper immunohistochemical stains, and observing a less abundant vasculature.

We present this case as the FPF, clear cell type, which is a rare histologic presentation of a common entity. Recognition of this variant would be important to distinguish this from other clear cell neoplasms.

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DOI: 10.1111/j.1468-3083.2007.02160.x

Cutaneous vasculitis following an intradermal tattoo

Editor

Tattooing is a popular practice that is increasing all over the world, especially among young people. Its complications represent a frequent complaint in dermatological practice.

A 21-year-old man with no previous medical history presents a generalized dermatosis that started 10 days before. Lesions appeared a week after the patient had a tattoo with black and red colourants on his right leg. He already had a black tattoo on the same leg he had had made 5 years before.

Upon examination, the patient appears generally ill with generalized cutaneous lesions that predominate on extremities and gluteal regions (fig. 1). Individual lesions consist of purpuric papules with vesicles and blisters in an erythematous base with serohematic content (fig. 2). Most of the lesions are impetiginized and there is an area of superimposed cellulitis. These lesions extend over both the new and old tattoos and on previously unaffected skin. The patient is also asthenic and presents intermittent fever.

fig. 1 Purpuric lesions disseminated on the gluteal region with blister formation.