

CLINICAL IMAGES

Tattoo reactions as a sign of sarcoidosis

Joel Post JD MD, Peter Hull MB BCh PhD

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Affiliations: From the Department of Ophthalmology (Post) and the Division of Dermatology, Department of Medicine (Hull), University of Saskatchewan, Saskatoon, Sask.

Correspondence to: Dr. Joel Post, joel_post@yahoo.com

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Figure 1: Scaly, inflamed skin over the tattoos of a 34-year-old man, with the surrounding skin uninvolved.

A 34-year-old man was referred to the dermatology clinic with a five-month history of his tattoos becoming red, scaly and painful. Over the same period, he noted fluctuating blurry vision in both eyes with associated pain and photophobia, along with shortness of breath. He had no history of pain in his joints or other lesions of the skin. His medical and family history were noncontributory. On examination, every tattoo was inflamed, raised and deeply indurated. Superficial fine scaling was noted on most of the tattoos (Figure 1). The patient was given a potent topical steroid. Sarcoidosis was suspected and investigations were undertaken, along with ophthalmology and respiratory consultations. The results of a skin biopsy showed nonnecrotizing granulomas, with negative results on acid-fast bacillus and fungal stains (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.110696/-/DC1). Blood tests showed hypercalcemia and an abnormally high angiotensin-converting enzyme level. A high-resolution computed tomographic scan showed a diffuse increase in interstitial markings but did not show mediastinal adenopathy. A diagnosis of sarcoidosis was supported by the presence of cutaneous sarcoidal granulomas, together with

granulomatous uveitis and suggestive pulmonary changes.

Reactions in cosmetic tattoos relating to sarcoidosis have been reported as early as 1952.^{1,2} The cause of sarcoidal reactions in tattoos remains unknown. This finding may be a specific cutaneous manifestation of sarcoidosis in which the pigment in tattoos acts as a nidus for granuloma formation; such reactions may be the only manifestation of cutaneous sarcoidosis.³ Alternatively, the systemic spread of the tattoo pigment could cause a reaction in other sites, simulating systemic sarcoidosis.⁴ However, if other clinical features are present such as uveitis or pulmonary involvement, the possibility of systemic sarcoidosis should be considered.

References

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