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Tattoo induced sarcoidosis

Roberto D'Alessandro[1], Marco Bardelli[1], Elena Bargagli[2], Bruno Frediani[1], Enrico Selvi[1]

[1] Rheumatology Unit-Department of Medicine, Surgery and Neurosciences – University of Siena, Siena, Italy; [2] Pneumology Unit-Department of Medicine, Surgery and Neurosciences, - University of Siena, Siena, Italy.

To the Editor,

We herein report the case of a 40-years-old female patient with unremarkable medical history who presented to the emergency department complaining of recent onset of fever and symmetrical ankle arthritis. On the suspicion of reactive arthritis, treatment with antibiotics and prednisone was promptly started. Ten days later, the patient experienced a relapse of the symptoms associated with an increase of acute phase reactants. Physical examination showed bilateral knee and ankles swelling, together with localized small papular and painful lesions on her left shoulder in correspondence of an old black small tattoo. A complete ophthalmological examination did not show signs of ocular involvement. In the suspicion of a tattoo-promoted sarcoid reaction, a punch biopsy of the skin was performed, confirming the diagnosis of systemic sarcoidosis with cutaneous and articular involvement (Figure 1A-1B). Serum level of angiotensin-converting enzyme and lysozyme were normal, and a chest X-ray showed no abnormalities. A treatment with steroids and methotrexate (MTX) was started leading to a complete remission of the disease within 6 months. Tattoo associated sarcoidosis, has been reported since 1939 (1). It may have a systemic or localized involvement and diagnosis, besides clinical features, primarily relies on histopathology. After biopsy confirmation, a systemic check-up should be performed (1). The incidence of tattoo-induced sarcoid arthritis is unknown, but up to 25% of patients with sarcoidosis have an associated acute or chronic arthritis. Ankles are the most frequently involved joints occurring in 75–100% of the patients (2). Corticosteroids and disease-modifying antirheumatic drugs including MTX and hydroxychloroquine proved effective on systemic features (3,4). Furthermore, ocular uveitis might be present in about 40% of the cases and must be kept in consideration in the clinical assessment of tattoo associated systemic sarcoidosis (5). This case shows how tattoo induced sarcoidosis may occur decades after tattooing and even monochromatic small tattoos are able to induce systemic inflammatory reaction, in contrast to what previously reported (3).

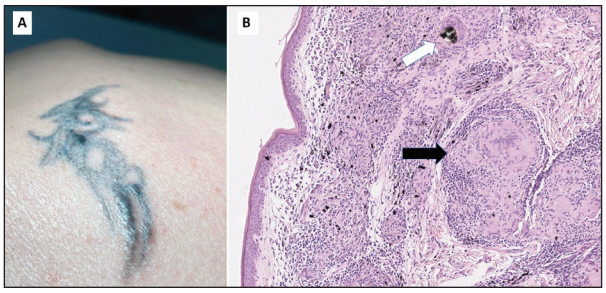

Figure 1. A) Photo of the small black tattoo of 2 inches length, made 20 years earlier, surrounded by cutaneous erythema. B) Histopathology of the lesions, showing non-caseating granulomas (black arrow) with epithelioid giant cells often embedding black pigments (white arrow).

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Correspondence:
Corresponding author:
Roberto D'Alessandro MD
E-mail: rt.dalessandro@gmail.com

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