Tattoo Sarcoidosis

Vijairam Selvaraj, Kwame Dapaah-Afriyie, MD, MBA

1 Division of Hospital Medicine, Department of Medicine, Miriam Hospital,
2 Department of Medicine, Brown University

Abstract

Sarcoidosis is a chronic, multisystem inflammatory disorder of unknown etiology. Skin involvement occurs in about 20-30% of cases. We describe a young man with fevers, night sweats and chest pain who was eventually diagnosed with cutaneous sarcoidosis.

1. Specific lesions associated with the presence of non-caseating granulomata.
2. Non-specific reactive inflammatory response as seen in cases of erythema nodosum and calcinosis cutis.

Cutaneous sarcoidosis can be the initial presenting sign of this condition or develop later in the disease. The disease has varying clinical manifestations and patterns due to many factors, including race, ethnicity, and gender.

Cutaneous lesions include:

1. Lupus Pernio
2. Maculopapular
3. Nodular
4. Erythema nodosum in isolation or as a component of Lofgren’s syndrome
5. Scar Sarcoidosis
6. Subcutaneous variant- also known as Darier-Roussey variant.
7. Less common forms include Angiolupoid – also known as Brocq-Pautrier angiolupoid Psoriasiform, Verrucous, Erythrodermic, Ulcerative, and Ichthyosiform variants.

Scar sarcoidosis can occur in sites of prior injuries, or tattoos. Scar involvement is rare but characteristic of cutaneous sarcoidosis. These lesions may develop between 6 months and up to 5 decades at sites of prior trauma. The presentation may mimic an acute inflammatory response with lesions being erythematous, scaly, and itchy or have a subacute onset.

Tattoo sarcoidosis occurs more frequently with red ink (cinnabar) tattoos but can also be seen with other forms of pigment. Lip and eyebrow lesions have been reported. Scar sarcoidosis may be misdiagnosed as keloids.
and since both conditions may respond to intralesional steroids, the diagnosis may be missed if lesions are not biopsied. Koebnerization may occur in cases of Scar sarcoidosis resulting in lesions developing at venipuncture sites and sites of IV injections.

All cases of Scar sarcoidosis require evaluation to exclude systemic disease. The management depends on whether this is an isolated cutaneous sarcoidosis or part of a systemic disease. In the evaluation for systemic illness, it should be noted that the “Scar sign” - scars due to sarcoidosis are FDG-Avid and light up on PET/CT scans. Cutaneous lesions are usually managed with topical steroids, or in more severe cases, prednisone, Methotrexate, or laser therapy may be needed.

**Disclosures/Conflicts of Interest**

The authors have no conflicts of interest to disclose.

**Author Contributions**

All Authors have reviewed the final manuscript prior to submission. All the authors have contributed significantly to the manuscript, per the ICJME criteria of authorship.

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-NC-4.0). View this license’s legal deed at https://creativecommons.org/licenses/by-nc/4.0 and legal code at https://creativecommons.org/licenses/by-nc/4.0/legalcode for more information.

**Figure 1.** Induration of tattoo lines on the forearm
REFERENCES


