

LETTERS TO THE EDITOR

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Tattoo-related Uveitis: A Devastating and Fairly Common Association

Dear Editor:

Tattoos have grown increasingly popular worldwide, with a prevalence of about 24%. While complications are rare (approximately 2%), they can range from infections to more severe conditions, such as tattoo-related uveitis.¹ This letter presents the case of a 31-year-old male patient with tattoo inflammation that was associated with recurrent uveitis. Clinical evaluation and laboratory tests ruled out sarcoidosis and other systemic conditions. A potential association between tattoo inflammation and uveitis episodes was noted, suggesting immune dysregulation as a shared mechanism. Management included localized treatment of the tattoo and monitoring for uveitis exacerbations. Tattoo removal was contraindicated due to the risk of triggering further inflammation. This case highlights the need for collaborative care between dermatologists and ophthalmologists for effective management of tattoo-related uveitis, a rare but significant complication.

A 31-year-old male patient presented with a large tattoo over his left shoulder that had been asymptomatic for two years before he began experiencing elevation and hardening of the inked area with mild burning sensations. Initially, the patient self-medicated using a cream containing betamethasone, clotrimazole, and neomycin, which temporarily resolved the symptoms. However, six months later, the inflammation recurred, prompting him to seek dermatological evaluation. On examination, the affected tattoo displayed mild elevation and induration (Figure 1). The patient disclosed a history of recurrent uveitis diagnosed eight months earlier, which was treated with oral prednisone. Interestingly, he reported that the tattoo symptoms improved whenever he used oral prednisone for his uveitis, suggesting a potential link between the two conditions.

A thorough workup, including a chest x-ray and complete blood count, yielded unremarkable results. This ruled out systemic conditions, such as sarcoidosis, commonly associated with similar presentations.



FIGURE 1. A thickened tattoo of the left shoulder

The treating dermatologist established a connection between the relapses of tattoo inflammation and episodes of uveitis, noting that localized treatment of the tattoo also appeared to alleviate uveitis symptoms.

The case was managed collaboratively with an ophthalmologist, focusing on localized treatment for tattoo inflammation while maintaining vigilant monitoring for uveitis exacerbations. Tattoo removal was deemed contraindicated due to the high risk of

triggering further inflammation.

Tattoo-related uveitis is a rare but significant complication. Kluger² reviewed 39 cases of tattoo-associated uveitis between 1952 to 2018, with six more reported since.³ The pathophysiology remains unclear, but a delayed hypersensitivity reaction to tattoo ink components is suspected.¹ Another hypothesis links it to immune dysregulation in sarcoidosis, which should be excluded in these patients.⁴ However, diagnosing sarcoidosis is challenging

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due to the lack of definitive tests, though supportive measures include chest x-ray or computed tomography and serum angiotensin-converting enzyme (ACE) levels.²

Kluger² introduced the acronym TAGU (tattoo granulomas with uveitis) for cases where sarcoidosis is excluded. TAGU can present with erythema, tenderness, induration, and pruritus of the tattoo, and histology typically shows noncaseating granulomas with ink deposition in the dermis. Ocular manifestations range from iridocyclitis to panuveitis.⁴

Management involves corticosteroids and immunosuppressive therapies.² Excision is viable for small tattoos but more challenging for larger ones. Laser tattoo removal carries a specific risk: fragmented tattoo ink particles may trigger a Type IV cutaneous allergy.⁵

This case underscores the need for multidisciplinary care in managing tattoo-related complications, especially when systemic associations such as uveitis are suspected.

With regard,
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