



## Sparing Phenomenon in Tattoos: An Underestimated Phenomenon

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Dear Editor,

I read with great interest the recent article by Bojahr et al published in the Journal about a patient that experienced sparing phenomenon, reverse Koebner type, as chronic urticaria spared tattooed areas [1]. As the authors acknowledged, sparing phenomenon is non-specific from a skin condition and is not restricted to psoriasis or urticaria. The frequency of this phenomenon is unknown but could be underestimated. It may go unnoticed for the patient if the phenomenon is too mild to be noticed: small tattoos, low number of tattoos, lack of extensive rash, lack of symmetry of the rash, and lack of notable impact on patient quality of life. Additionally, physicians may simply overlook it due to lack of interest to search specifically for this phenomenon in a tattooed patient.

As a dermatologist with specific interest in tattoos and tattoo-associated health issues, I tend to observe with care the tattooed skin of my patients. In my own experience, both in France or in Finland, I have seen patients disclosing sparing

phenomenon with various conditions, such as psoriasis (N = 2 patients), including 1 that was previously reported [2], atopic dermatitis (N = 2), maculopapular exanthema (N = 2), including 1 case figure published elsewhere [3], cutaneous vasculitis (N = 2), and cutaneous vasculopathy in hepatitis C (N = 1). As showed by Spyridonos et al, it may be difficult to notice a clear difference with the naked eye, and automated mathematic tools may be of help [4]. There is also sometimes a thin line between a mild sparing phenomenon and the eye of faith of the observer. Acknowledging these limitations, sparing phenomenon in tattoos exists and shows that tattoos are not fully inert in the skin. The cause of this local anergy is unknown but for psoriasis, and it has been well known since the work by Eyre and Kruegger [5]. Future studies should evaluate the prevalence of skin diseases in heavily tattooed individuals that display tattoos from head to toe. I would not yet recommend that patients get tattooed only to induce remission of the disease.

## References

1. Bojahr K, Sztramska A, Zysk W, Rolewicz A, Romantowski J, Chelmińska M. Does a Tattoo Protect Against Chronic Spontaneous Urticaria? An Unusual Finding. *Dermatol Pract Concept*. 2024;14(3):e2024172. DOI: 10.5826/dpc.1403a172. PMID: 39122532. PMCID: PMC11314273.
2. Kluger N, Jegou MH. Psoriasis et phénomène de Koebner inversé après tatouage [Psoriasis and reverse Koebner response after tattooing]. *Ann Dermatol Venereol*. 2018;145(1):48-9. DOI: 10.1016/j.annder.2017.01.005. PMID: 28237534.
3. Kluger N. Phénomènes de Kœbner, Renbök, Wolf et Cie... est-il temps de simplifier ? [Köbner, Renbök, Wolf phenomena and so on... has the time come for simplification?]. *Ann Dermatol Venereol*. 2018;145(5):347-53. DOI: 10.1016/j.annder.2018.02.006. PMID: 29673749.
4. Spyridonos P, Zampeli V, Rapti SN, Bassukas ID. A Gut-tate Psoriasis That Tends to Spare Three Tattoos: A Macrophage Liaison. *Case Rep Dermatol Med*. 2021;2021:9448636. DOI: 10.1155/2021/9448636. PMID: 34552797. PMCID: PMC8452437.
5. Eyre RW, Krueger GG. Response to injury of skin involved and uninvolved with psoriasis, and its relation to disease activity: Koebner and 'reverse' Koebner reactions. *Br J Dermatol*. 1982;106(2):153-9. DOI: 10.1111/j.1365-2133.1982.tb00924.x. PMID: 7037041.