

## Immunocompromised Cutaneous District– A Case of Tattoo-Associated Warts

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**Citation:** Vijay V, Karunanandhan M, Singh Y. Immunocompromised Cutaneous District– A Case of Tattoo-Associated Warts. *Dermatol Pract Concept.* 2026;16(1):5580. DOI: <https://doi.org/10.5826/dpc.1601a5580>

**Accepted:** June 23, 2025; **Published:** January 2026

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**Funding:** None.

**Competing Interests:** None.

**Authorship:** All authors have contributed significantly to this publication.

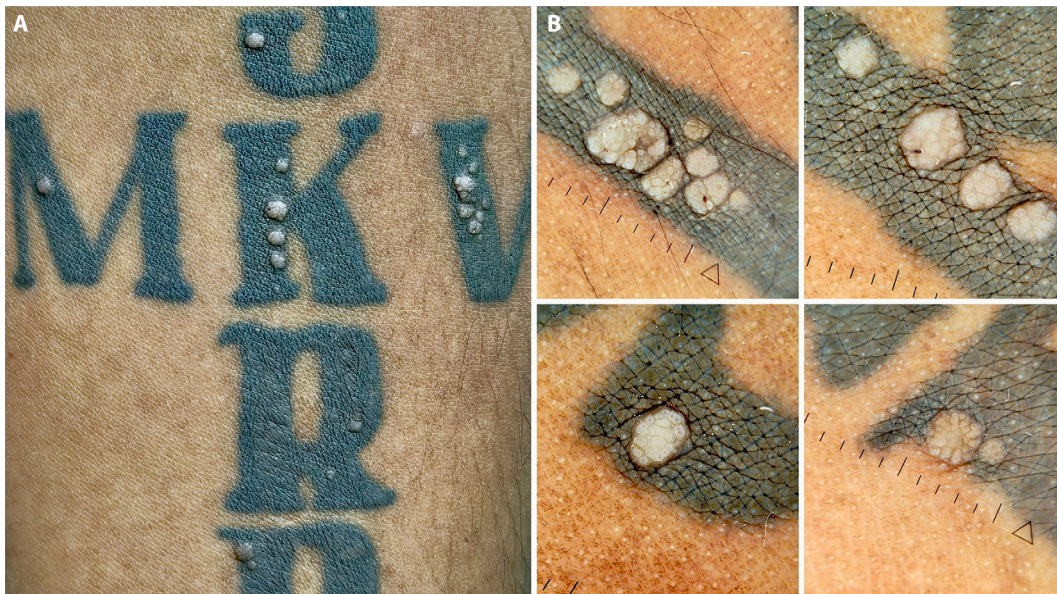
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### Case Presentation

A 26-year-old male presented with complaints of raised lesions on left forearm tattoos for the preceding six months. The patient gave history of undergoing tattooing two years earlier by a professional tattoo artist. On examination, multiple verrucous papules were seen confined to areas of the tattoo on the flexor aspect of left forearm (Figure 1A). Dermoscopy (Heine's delta30, non-polarized, 10x magnification) revealed well defined margins, papillae, red dots, and globules (Figure 1B). Other sites of the body were normal. Routine investigations, including serology for HIV and hepatitis, were negative. Based on the clinical and dermoscopic characteristics, the patient was diagnosed with tattoo-associated verruca vulgaris (warts). The warts were treated by electro-fulguration.

### Teaching Point

Verruca is an infectious disease caused by human papilloma virus (HPV). There are more than 200 serotypes of HPV virus [1]. The various types of warts are verruca vulgaris (common wart), verruca plana (plane wart), filiform wart, plantar warts, and anogenital warts. Warts typically manifest as white/pink to skin-colored flat-topped papules. The pathophysiological mechanism that facilitates HPV localization to tattooed area might encompass either the traumatic deposition of HPV during the tattooing process, i.e., contamination from tattoo inks or instruments, or, alternatively, local immune dysregulation due to tattoo ink [2,3]. Warts are primarily diagnosed through clinical assessment, although biopsy may serve to corroborate the diagnosis in cases of uncertainty. Dermoscopy is a rapid, readily accessible



**Figure 1.** A: Multiple verrucous papules confined to areas of tattoo on the flexor aspect of left forearm. B: Dermoscopy (Heine's delta30, non-polarized, 10x magnification) revealed well defined margins, papillae, red dots, and globules.

diagnostic technique that can facilitate the diagnosis of warts noninvasively. Tattoos not only impart permanent markings upon the skin but can also precipitate disfiguring infections if done without adherence to appropriate safety protocols.

## References

1. Cohen PR. Verruca Vulgaris Occurring on a Tattoo: Case Report and Review of Tattoo-Associated Human Papillomavirus Infections. *Cureus*. 2021;13(8):e17575. Published 2021 Aug 30. DOI:10.7759/cureus.17575. PMID: 3481100.
2. Kirchof MG, Wong SM. Tattoos and human papilloma virus: A case report of tattoo-associated flat warts (verrucae planae). *SAGE Open Med Case Rep*. 2019;7:2050313X19857416. Published 2019 Jun 19. DOI: 10.1177/2050313X19857416. PMID: 3165243.
3. Huynh TN, Jackson JD, Brodell RT. Tattoo and vaccination sites: Possible nest for opportunistic infections, tumors and dysimmune reactions. *Clin Dermatol* 2014; 32: 678-684. DOI: 10.1016/j.clindermatol.2014.04.016. PMID: 25160110.