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Accure 1726 nm Laser Does Not Affect Tattoos: A Case Report with Clinical and Procedural Evidence

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ABSTRACT

Background: *The 1726 nm Accure™ laser, designed for sebaceous gland modulation, has gained attention in acne and seborrheic dermatitis management. However, no published evidence exists on its safety when applied over tattooed skin.*

Case: *We describe a 30-year-old female with a black-ink tattoo on the left shoulder who underwent three sessions of Accure 1726 nm laser directly over the tattoo as part of a sebaceous gland study. No changes in tattoo color, texture, or definition were observed, and no adverse reactions occurred. Subsequently, the patient underwent picosecond 755 nm laser sessions for tattoo removal, which proceeded normally with effective pigment fragmentation and clearance.*

Clinical Pearl: *Unlike conventional pigment-targeting lasers (532, 694, 755, 1064 nm), the 1726 nm wavelength is absorbed by water and sebaceous lipids, not exogenous tattoo pigments.*

Conclusion: *The Accure 1726 nm laser appears safe to use over tattoos and does not interfere with subsequent tattoo removal. This case represents the first clinical evidence of tattoo–laser compatibility at this wavelength.*

Keywords

1726 nm laser, Accure, Tattoo safety, Sebaceous gland modulation, Picosecond tattoo removal.

Introduction

Tattoos are increasingly common worldwide, with studies estimating that up to 30% of adults have at least one tattoo [1]. Given the rise in aesthetic and medical laser procedures, interactions between tattoos and lasers are of significant clinical importance. Lasers with pigment-specific absorption spectra—such as Q-switched or picosecond 532, 694, 755, and 1064 nm devices—are widely used for tattoo removal but can also inadvertently damage tattoos when used for other purposes [2,3].

The Accure 1726 nm laser, developed for sebaceous gland modulation, operates through selective photothermolysis of lipid-rich sebaceous structures while sparing the epidermis via integrated forced air cooling and real-time thermal monitoring [4,5]. Unlike shorter wavelengths, 1726 nm energy is absorbed primarily by water and lipids, not by tattoo pigments [6].

To date, there are no published reports on the safety of applying the 1726 nm wavelength directly over tattooed skin. We report the first case demonstrating that the Accure laser does not alter tattoo integrity and does not interfere with subsequent tattoo removal using a pigment-targeted picosecond device.

Case Report

A 30-year-old female (Fitzpatrick skin type IV) with a black-

ink tattoo on her left shoulder was enrolled in a clinical trial investigating the sebaceous gland–targeting effects of the Accure 1726 nm laser.

Treatment protocol

- Device: Accure 1726 nm laser (Accure Acne, Inc. Colorado USA)
- Sessions: 3
- Interval: 2 weeks
- Parameters: Integrated forced air cooling (–1 °C), real-time temperature monitoring, pulse stacking to sebaceous threshold (Peak Epidermal Temperature endpoint)

All sessions were applied directly over the tattooed area (Figure 1A). The patient reported no discomfort beyond transient mild erythema, which resolved within hours.

Figure 1A: Black-ink tattoo prior to Accure treatment. (top)
Figure 1B: After three Accure sessions: no change in tattoo pigmentation or definition. (bottom)

Follow-up observations

- No visible change in tattoo pigmentation, edge definition, or skin texture (Figure 1B).
- No blistering, pigmentary alteration, or scarring.
- Tattoo remained stable over several months of follow-up.

Subsequent tattoo removal

The patient later elected to undergo tattoo removal with a picosecond 755 nm Alexandrite laser. Multiple sessions were performed, resulting in normal pigment fragmentation and progressive clearance of tattoo ink (Figures 2 and 3).

Figure 2: Clinical image showing baseline tattoo appearance (top) and the same area after two sessions of picosecond laser treatment for removal (bottom), demonstrating normal pigment fragmentation and expected tissue response.

Figure 3: Clinical image showing baseline tattoo appearance (top) and the same area after six sessions of picosecond laser removal (bottom),

demonstrating progressive clearance without adverse effects attributable to prior Accure treatment.

The clinical response was typical for black-ink tattoos, with no delay or abnormal reaction, confirming that prior 1726 nm exposure had not altered pigment properties.

Discussion

This report provides the first clinical evidence that the 1726 nm Accure laser can be safely applied over tattooed skin without altering tattoo appearance or interfering with subsequent tattoo removal.

Laser–tattoo interactions

Tattoo pigments strongly absorb visible and near-infrared wavelengths commonly used in dermatology. Accidental exposure to Q-switched 532, 694, 755, or 1064 nm lasers can cause pigment fragmentation, discoloration, or paradoxical darkening [2,3]. For this reason, tattoos are often avoided during laser procedures.

Biophysics of 1726 nm

The 1726 nm wavelength lies outside the absorption peaks of tattoo pigments. Instead, it is absorbed by water and sebaceous lipids, leading to selective heating of sebaceous glands [4-6]. This explains its efficacy in acne and seborrheic dermatitis [5,6], while sparing exogenous chromophores like tattoo ink.

Clinical pearl

For dermatologists and aesthetic practitioners, the presence of tattoos in treatment areas often complicates device-based therapy. Our observation suggests that Accure can be safely applied over tattoos without concern for pigment alteration. Importantly, the patient's later tattoo removal with a pigment-specific picosecond laser proceeded normally, reinforcing that 1726 nm exposure does not impair subsequent therapeutic options.

Limitations

This is a single case report involving a black-ink tattoo. Different pigments (red, green, yellow) may interact differently. Longer follow-up and controlled studies are needed to confirm long-term safety across diverse tattoo colors and skin types.

Conclusion

The 1726 nm Accure laser can be safely applied over tattoos without altering tattoo color, texture, or definition. Prior exposure does not compromise subsequent picosecond tattoo removal. This finding provides reassurance for clinicians using Accure in tattooed patients and supports broader adoption of the device in real-world practice. Larger studies are warranted to validate these early findings.

Conflicts of interest

Vaughan Daniels-Hepnar is a Partner at Vaughan Medical LLC and Director of Clinical Education and Development at Accure Acne, Inc.

References

1. Kluger N, Koljonen V. Tattoos, inks, and cancer. Lancet Oncol. 2012; 13: e161-e168.
2. Anderson RR, Parrish JA. Selective photothermolysis: precise microsurgery by selective absorption of pulsed radiation. Science. 1983; 220: 524-527.
3. Kuperman-Beade M, Levine VJ, Ashinoff R. Laser removal of tattoos. Am J Clin Dermatol. 2001; 2: 21-25.
4. Goldberg D, Kothare A, Doucette M, et al. Selective photothermolysis with a novel 1726 nm laser beam: A safe and effective solution for acne vulgaris. J Cosmet Dermatol. 2023; 22: 486-496.
5. Alexiades M, Kothare A, Goldberg D, et al. Novel 1726 nm laser demonstrates durable therapeutic outcomes and tolerability for moderate-to-severe acne across skin types. J Am Acad Dermatol. 2023; 89: 703-710.
6. Paasch U, Bodendorf MO, Grunewald S, et al. Tattoo removal by picosecond laser: a systematic review. Lasers Med Sci. 2016; 31: 331-342.
7. Alster TS, Bryan H, Williams CM. Long-term efficacy of Q-switched lasers in tattoo removal: a 10-year follow-up study. Arch Dermatol. 1995; 131: 929-934.