

Single vs. Repeat Exposure Tattoo Removal during Single Sessions with Picosecond Pulse Duration Laser Technology

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Study Design:

- 20 subjects with 26 tattoos, avg. 35.8 years old and Fitzpatrick skin types I-V.
- Up to 3 treatments with laser settings ranging from 1.11-6.37J/cm with a 2.0-4.8 mm spot size and 750ps pulse duration at 6 week intervals.
- Tattoos were divided evenly and one half received a single treatment pass and the other half received 2 treatment passes separated by a 20 minute interval (R20 method).

Results:

- The R20 and single pass methods showed a 3.4 and 2.1 fold clearance after the 1st treatment respectively ($p=0.005$).
- The R20 and singles pass methods showed a 4.5 and 3.3 fold clearance after the 3rd treatment respectively ($p=0.002$).

Conclusion:

- Using either the R20 method or the single pass treatment provides a safe and efficacious result with the PicoSure laser when treating a variety of skin types.
- The R20 method shows slightly better treatment outcomes than a single pass treatment.

