LASER REMOVAL OF TATTOOS

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TYPES OF LASERS USED

- Q-Switching lasers are used.
  i. Nd:YAG.
     - 532nm treats brighter colors.
     - 1064nm treats darker colors, has deepest penetration offering minimal skin damage.
  ii. Ruby laser.
  iii. Alexandrite.
- Picosecond laser.

WHY ARE THEY BEST SUITABLE FOR THIS APPLICATION?

- Corresponds with wide range of tattoo ink colors.
- They have a high precision which instantly fragments concentrated color pigmentation.
- Due to deep penetration minimal scarring occurs.
- Safe to use on the human skin.
- It is possible to generate short pulses of only a few nanoseconds but several millijoules in power(Q-Switching).
- Peak power can be in megawatt range(Q-Switching).

LASER PARAMETERS

- Wavelength: 532nm and 1064nm.
- Reliability.
- Power.
- Irradiance: approximately 107W/cm2
- Pulse duration of laser applied.

TYPES OF LASERS USED

- Tattoo Removal Lasers: Types & Differences (tattoohealth.org)
- Tattoo Removal Laser Differences | LaserAway
- How Tattoo Removal Works, Q-Switched Laser Technology (astanzalaser.com)