

Thoughts on The Unusual Case of a Burn within a Tattoo After IPL Epilation

A case has recently been reported in which a patient undergoing hair removal treatment using an intense pulsed light (IPL) device sustained a second-degree skin burn [1]. This came to light when a 33-year-old female patient attended the emergency department due to a second-degree skin burn after an IPL epilation therapy 5 days earlier. The skin showed a normal finding apart from a black-ink tattoo on the lateral distal side of the right lower leg. Part of the tattooed areas showed loss of the epidermis and superficial dermis. Moreover the burned areas had lost part of the tattoo ink (see figure).



Figure from Riml et al (2013) used with permission

The wound was treated conservatively and healed within 3 weeks after the accident, partly with slight signs of scarring regarding skin texture. However, more conspicuous was a loss of tattoo pigment within the burned areas, leaving a partially destroyed tattoo behind. The problem occurred due to the fact that the hair removal treatment field extended onto the tattoo. The pigment of the tattoo absorbed the IPL treatment beam, and this resulted in a skin burn. Although the burn resolved, it left a depigmented area in the tattoo.

Adverse effects from laser/IPL treatments are well recognized, and the presentation of this case is a timely reminder of the problems that can occur when treatment is carried out inappropriately. This case demonstrates the risks associated with IPL treatment.

As described, it certainly appears to be the case that the operator was lacking in the necessary knowledge to perform the treatment safely or was simply careless in carrying it out. Commenting on the incident, Prof Moseley says that he has encountered numerous cases of inappropriate laser/IPL treatments that have been carried out by both physicians and non-physicians. He states that the key essentials that should be required of those carrying out such treatments are that they should be trained and competent and the responsible person should belong to a registered profession [2]. This should be the focus of our attention in order to raise standards of care in laser/IPL treatment. BMLA has called for this in its submissions to Department of Health in recent years and continues to promote safe use of lasers by running training courses at the annual conference.

[1] Riml S, et al. *Photoderm Photoimmunol Photomed* 2013; **29**: 218–220.

[2] Moseley H. *Photoderm Photoimmunol Photomed* 2014; **30**: 52.