

# **Beauty Clinic**

**A Report by the  
Deputy Health and Disability Commissioner**

**(Case 19HDC02118)**



Health and Disability Commissioner  
*Te Tuihau Hauora, Hauātanga*

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## Executive summary

1. This report considers the care provided to a woman by a beauty clinic in October 2019.
2. The woman purchased a voucher for what she believed to be an intense pulsed light (IPL) hair removal treatment for her underarms. The clinic treated the woman's underarms with a laser hair removal treatment instead, and the woman sustained an injury following the treatment. It has not been possible to determine the cause of the injury, but the woman's complaint raised a number of issues with the care she received at the clinic.
3. The report discusses the adequacy of the clinic's policies, and the need for appropriate education of staff.

## Findings

4. The Deputy Commissioner considered that the woman was not provided with sufficient information to make an informed choice about the procedure she was to receive, and found the clinic in breach of Right 6(1) of the Code. As the woman was not in a position to make an informed choice about her treatment, the Deputy Commissioner found the clinic in breach of Right 7(1) of the Code.
5. The Deputy Commissioner also discussed the right for consumers to have services provided in compliance with legal, professional, ethical, and other relevant standards. In particular, the clinic, as an employer, had a responsibility to ensure that its staff were aware of, and complied with, the requirements of the Auckland Council Health and Hygiene Code of Practice, which requires providers to identify and record the customer's medical history and suitability for the service, obtain a signed consent form from the customer, and provide the customer with written advice regarding the precautions and post-service procedures appropriate to the procedure. The Deputy Commissioner concluded that the clinic did not ensure that services were provided to the woman in accordance with relevant standards, and, accordingly, that the clinic breached Right 4(2) of the Code.

## Recommendations

6. The Deputy Commissioner recommended that the clinic provide the woman with a written apology for its breaches of the Code.
7. The Deputy Commissioner also recommended that the clinic develop a system for the clear identification of which employee has performed which treatment, and ensure that all relevant staff undertake further training on the Auckland Council Health and Hygiene Bylaw 2013 and associated Code of Practice, and the Australia New Zealand Standard (AS/NZ 4173:2018), as well as create policies for staff to follow in line with these standards.

## Complaint and investigation

8. The Health and Disability Commissioner (HDC) received a complaint from Mrs A about the services provided by a beautician at a beauty clinic (the clinic). The following issue was identified for investigation:
- *Whether the clinic provided Mrs A with an appropriate standard of care on 29 October 2019.*<sup>1</sup>
9. This report is the provisional opinion of Dr Vanessa Caldwell, and is made in accordance with the power delegated to her by the Commissioner.
10. The parties directly involved in the investigation were:
- |               |            |
|---------------|------------|
| Mrs A         | Consumer   |
| Beauty clinic | Provider   |
| Ms B          | Beautician |
11. Further information was received from Ms C, a beautician.
12. Independent expert advice was obtained from a beauty therapist, Ms Heather Thompson (Appendix A).
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## Information gathered during investigation

### Introduction

13. This report discusses the care provided to Mrs A when she attended the clinic in October 2019 for what she believed to be an intense pulsed light (IPL) hair removal treatment, having purchased a voucher for IPL treatment at the clinic.

### Background

#### *Laser and intense pulsed light treatment*

14. Laser and intense pulsed light treatment (IPL) can be used for hair removal, pigmentation and redness reduction, skin rejuvenation, and tattoo removal. However, laser and IPL are different technologies given their differences in light wavelengths, settings, and energies of the machine used, and in the way the treatments are performed.

#### *Beauty clinic*

15. The clinic described itself as a licensed beautician business that specialises in hair removal treatment, skin care, body shape, postpartum repair, and filling and wrinkle-relieving

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<sup>1</sup> Initially, HDC also notified Ms B in relation to this complaint. However, that investigation was discontinued.

injections. The clinic told HDC that at the time of events, it had two employees, Ms C and Ms B.

### **Initial appointment on 29 October 2019**

16. On 29 October 2019, Mrs A attended the clinic for IPL underarm hair removal treatment. Mrs A told HDC that when she arrived for her appointment, the beautician took her straight to the treatment room and, once she was ready, the beautician started the procedure. Mrs A said that she was advised by the beautician that she was having an IPL treatment. Mrs A stated that there was “no discussion about the nature of the procedure or discussion of risks or benefits”, and she does not recall being given any documentation. Mrs A also said that no one carried out a patch test on her skin. She stated that the procedure was painful, and when she raised this with the beautician, she was told that the pain was “fine” and “normal”. Mrs A told HDC that the only post-treatment advice provided by the clinic was to “avoid the sun and heat for the [next] 24 hours”.
17. The clinic did not provide HDC with copies of any policies or procedures regarding treatment provided at the clinic. The clinic told HDC that prior to the treatment, Mrs A was given information to shave the treatment site to “ensure the skin’s hygiene”, complete a self-examination to check whether she is allergic to “photons<sup>2</sup>”, and to be mindful of sun exposure following the treatment and to use sunscreen. The clinic said that Mrs A filled out a “form” on arrival, and the beautician had a discussion with Mrs A about changing the service from IPL to a laser treatment given her skin tone. The clinic stated that the beautician also discussed the benefits of laser hair removal.
18. The clinic described Mrs A’s treatment as follows: the client lies down and they are provided with an eye mask to protect their eyes, a cold gel is applied to the treatment site, a small skin patch is tested and then the “appropriate treatment parameters” are selected.<sup>3</sup> The clinic advised HDC that “[Mrs A] did not feel any discomfort during the treatment”, and it was recorded that the post-treatment assessment was “normal”. The clinic said that it used the Fitzpatrick assessment score<sup>4</sup> to assess Mrs A’s skin tone, and her skin tone meant that “the machine would automatically reduce the heat level to protect [against] burns”. The clinic told HDC that Mrs A was assessed to have a Fitzpatrick skin type of 4. However, the Fitzpatrick assessment and the skin patch test are not documented in the records provided by the clinic.
19. The clinic told HDC that it provided Mrs A with the following safety-netting advice after the treatment: avoid sun exposure; apply sunscreen to the affected area; some light redness, swelling, sensitivity may occur and an ice compress can be used to relieve the pain; avoid hot washing and hard scrubbing of the treatment site; and no swimming or exercise within 24 hours. The clinic did not provide any documentation relating to these after-care instructions.

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<sup>2</sup> A photon is a particle of light.

<sup>3</sup> The clinic did not provide any copies of its policies.

<sup>4</sup> Skin type can be categorised according to the Fitzpatrick skin type scale, which ranges from very fair (skin type I) to very dark (skin type VI). Fitzpatrick skin type 4 is the highest risk skin type for ELOS/IPL treatment.

20. Mrs A told HDC that when she went home, her underarm areas were red, and she felt a “burning sensation but thought it [was] normal”. Mrs A said that the next morning, her “skin was burnt”. She provided HDC with photographs showing what Mrs A stated were “burns” to her underarm skin following her treatment at the clinic.

*Post 29 October 2019 treatment continuation*

21. On 4 November 2019, the clinic heard from the voucher company that Mrs A had experienced an adverse event following the treatment. The clinic contacted Mrs A to obtain more information about the injury, and asked whether she had had any other treatments, whether she had bathed with hot water or had a sauna, and whether she had sunbathed. Mrs A told the clinic that she had not undergone any further treatments, and had not had a hot bath or sunbathed. Mrs A provided the clinic with photographs of her underarm areas, which she described as “burns” to her underarm skin, and the clinic noted that her left armpit showed “signs of serious injury”. The clinic told Mrs A that it was confused about how this injury could have happened. Mrs A told the clinic that “she did not have any treatments following the IPL underarm”, and agreed to return to the clinic for treatment to reduce the pigmentation that had occurred following the earlier hair removal treatment.
22. The clinic advised HDC that on 21 November 2019, Mrs A attended its clinic for a pigmentation treatment with Ms B. The clinic told HDC that at this appointment, it provided Mrs A with antiseptic cream to apply on the affected areas, and asked Mrs A to let the clinic know if the wound reopened.
23. Mrs A confirmed that she completed the purchased sessions by returning to the clinic and having further laser treatments on her underarms on 12 December 2019, and 3 and 13 February 2020. The clinic said that Ms B carried out these treatments. The clinic told HDC that it did not document these follow-up treatments, and stated that this “was indeed the negligence of this clinic”.
24. The clinic did provide HDC with photographs of what the clinic states are Mrs A’s underarms taken between 3 and 13 February 2020. The photographs do not show any visible damage. The clinic also provided a chain of communication between its staff and Mrs A arranging further appointments and attempting to ascertain how the damage to Mrs A’s underarms happened. The clinic maintains that it is not clear how the damage occurred and, as far as it is concerned, Mrs A was satisfied with the treatment and the end result. The clinic told HDC that following the pigmentation and further laser treatments “at the site of the initial problem, there is now no abnormal reaction, [it] is completely healthy”.

*“Client Record” form*

25. The “Client Record” form dated 29 October 2019 lists Mrs A’s personal contact information and is signed by the beauty therapist and the client. It is unclear which beauty therapist signed the form, as no name is recorded. The form has a space to fill in information about the client’s doctor, medication, medical history, contraindications (such as pregnancy and allergies), skin concerns, the client’s prior experience with laser/IPL, and whether the client works outdoors or uses skin resurfacing treatments. However, none of this information has been filled out. The clinic told HDC that the reason this was not filled out was because Mrs

A advised that “she is a [health professional] and knew the content of the form, and there was no content to fill out”.

*Consent form*

26. The “IPL Laser Client Consent” form is dated 29 October 2019, and is signed by both the beauty therapist and Mrs A. As with the Client Record form, it is unclear which beauty therapist signed the consent form, as no name is recorded. The consent form lists some of the possible side effects, such as swelling, bruising, blisters; and some waivers about the possible outcomes of the treatment, including the greater risk of developing lighter or darker pigmentation for those with darker skin tones.

*“Laser Hair Removal Treatment Record”*

27. The “Laser Hair Removal Treatment Record” is dated 29 October 2019, and is signed by the beauty therapist. It is unclear who signed this form, as no name is recorded. The form states that Mrs A had her underarm areas treated. There is space for the beauty therapist to tick off that the appropriate safety measures were taken, such as whether everyone in the room was wearing goggles, and if the consent form was signed. However, none of the safety measures have been ticked. There is also a place to record the observations from a skin test spot, but this was not filled out. It was documented that a “post op assessment” took place and everything was “normal”.

*“Laser Treatment Log”*

28. The “Laser Treatment Log” for Mrs A records that she attended the clinic on three occasions: 29 October 2019, 12 December 2019, and 13 January 2020. All three appointments note that Mrs A had her underarm areas treated and that the “post op” assessment was “normal”.
29. The signature relating to the 29 October 2019 note in the Laser Treatment Log appears to be the same as the signature on the other forms dated 29 October 2019 (ie, the Laser Hair Removal Treatment Record, the IPL Laser Client Consent form, and the Client Record form). However, the signature for the 12 December 2019 and 13 January 2020 appointments in the Laser Hair Removal Treatment Record is different, and reads as “[Ms B]”.

*Training and supervision documentation*

30. This Office asked the clinic to provide a description of the supervision and training provided to employees at the clinic, together with supporting documentation. The clinic did not provide the information requested, but provided the following information about Ms B’s and Ms C’s qualifications and experience.

Ms B’s qualifications and experience

31. Ms B started work at the clinic in 2018. The clinic described her as a “very experienced beautician”, and provided a copy of Ms B’s beauty specialist diplomas<sup>5</sup> and a certificate

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<sup>5</sup> Ms B graduated in 2011 with a Beauty Specialist Diploma. The Clinic also provided a copy of a certificate that stated that Ms B had passed her exam in 2011 and had obtained a Level 2 Diploma for Beauty Specialists. The certificate stated that Ms B had completed the following units: skincare and eye treatments, manicure and pedicure, waxing, professional conduct and business awareness, and makeup.

recognising the training she had completed on the “808 Diode Laser hair removal technology”.<sup>6</sup> Prior to working at the clinic, Ms B had worked at a number of beauty clinics from 2012 to 2018, and had provided clients with IPL and laser treatments.

#### Ms C’s qualifications and experience

32. Ms C started work at the clinic in 2018 and finished in 2020. The clinic provided a copy of Ms C’s beauty specialist diploma and a certificate recognising the training she had completed on the “808 Diode Laser hair removal technology”. The clinic also provided other certificates relating to beautician training sessions, including further laser training Ms C had attended.
33. The clinic said that following the incident, it immediately asked Ms C to stop using the laser equipment and to stop providing clients with IPL. The clinic said that it also asked Ms C to carry out a review of Mrs A’s treatment. The clinic stated that following this event it also “strengthened its regulatory policies on IPL and laser use”. The clinic did not provide copies of its updated policies or provide an outcome as to Ms C’s investigation into what happened to Mrs A.

#### *Beautician who administered laser treatment*

34. The clinic initially told HDC that Ms B carried out the laser treatment on Mrs A. However, the clinic later advised that it was Ms C who treated Mrs A, as Ms B was on holiday and was not working that day. The clinic explained that the reason they initially told HDC that it was Ms B who had provided Mrs A with her first laser treatment is because Ms C had provided the initial response and information to HDC, and she had used Ms B’s name to respond to HDC’s request for further information. The clinic asserted that it was unaware of Ms C’s initial response until further correspondence was sent by HDC in 2021. Ms C submitted that for the short time she was working at the clinic, she provided mostly facial treatments. Ms C denied performing the procedure on Mrs A, and instead believes that it was Ms B. Ms C claimed that the clinic would ask her to sign documents, particularly for customers with vouchers, and she would not always understand what she was signing.
35. HDC requested that both the clinic and Ms C provide evidence of Ms C’s signature, but this information was not received.

#### **Responses to provisional report**

36. The clinic and Mrs A were given the opportunity to respond to the relevant sections of my provisional opinion.
37. Mrs A did not provide any further comments.
38. Ms B, on behalf of the clinic, provided a detailed reiteration of her qualifications and the professional standards to which she adheres, and a brief discussion of the successful rehabilitation services she provided to Mrs A. Ms B remained adamant that the treatment provided to Mrs A was of a high standard, and that the origin of the damage as presented

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<sup>6</sup> Ms B received this certification in 2016.



by Mrs A is unknown. The clinic denies damaging Mrs A's underarm area with the laser treatment it provided to Mrs A on 29 October 2019.

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## Opinion: Beauty clinic — breach

### Introduction

39. Mrs A complained to HDC about the damage to her underarms that she stated she sustained during laser treatment at the clinic. Mrs A explained that she felt a “burning sensation and redness” after the treatment on 29 October 2019 and the next morning she discovered that her underarm area was “burnt”. After careful consideration of the information supplied, as well as independent expert advice provided by Ms Heather Thompson, a beautician, I cannot conclusively determine the nature of the injury. Ms Thompson advised:

“With limited evidence in terms of client consultation forms being provided and conflicting statements from the clinic and client, I [cannot] be exactly sure as to how [the damage] happened ... Overall, the accounts offered by [the clinic and Mrs A] are so disparate that a clear judgment is not possible to make with the evidence provided.”

40. Nevertheless, I accept that Mrs A did sustain an injury to her underarms following laser treatment at the clinic. During my investigation into the origin of the damage demonstrated on photographs provided by Mrs A, it came to my attention that although it may not be possible to establish the origin of this damage, the processes used by the clinic during its treatment of clients required scrutiny.
41. The facts are disputed as to who carried out the hair removal treatment on Mrs A on 29 October 2019. On the evidence before me, and due to the lack of treatment records noting the name of the treating clinician, I am unable to make a finding. However, the clinic, as Ms C's and Ms B's employer, needed to have systems in place to ensure that its employees had the appropriate skills and knowledge to carry out treatments safely, that appropriate information about the client's suitability for treatment was obtained and documented, and that the person who performed the treatment was identified clearly. This is discussed further below.
42. My expert advisor, Ms Thompson, has concerns about aspects of the care provided to Mrs A, including the lack of complete documentation, the information provided to Mrs A about the treatment, the lack of evidence of Mrs A's consent, and how the treatment itself was carried out. Ms Thompson highlighted that the regulations in New Zealand regarding the use of lasers and IPL are such that there are no regulations that stipulate that clinics must obtain professional training in the use of either IPL or laser treatments.

### Use of laser in New Zealand

43. As highlighted in case 19HDC00698, the use of laser for hair removal and skin rejuvenation is largely unregulated in New Zealand. However, the Auckland Council Health and Hygiene

Bylaw 2013 and associated Code of Practice provides the minimum standards required of operators of laser machines in its area, and is aimed at reducing risks to public health. It does not specify or restrict who can use the type of laser utilised in this case.

44. Ms Thompson highlighted that in addition to the Auckland Council bylaw and code, the Australia New Zealand Standard<sup>7</sup> (AS/NZ 4173:2018) covers laser and IPL safety, although the standard is not specifically for aesthetic treatments.

#### **Training provided to staff**

45. The clinic provided HDC with information relating to Ms C's and Ms B's qualifications and beautician experience. However, the clinic did not provide any information relating to any supervision and training the clinic provided to its employees. It is unclear whether staff received any in-house training on the actual laser hair removal treatment, how to complete the documentation, and the risks and after-care discussions with patients.
46. I acknowledge that Ms C and Ms B had prior beautician experience with laser machines, but I am concerned that the clinic did not provide in-house training to ensure that its employees had the appropriate skills and knowledge to carry out these treatments.

#### **Information and consent**

47. Mrs A purchased an IPL treatment voucher. She stated that she did not know whether she was receiving IPL or laser treatment from the clinic, and explained that on the day of the treatment the beautician advised that she would be having an IPL treatment. The clinic provided HDC with a copy of text messages Mrs A sent to the clinic following the incident. In these messages, Mrs A referenced the fact that she thought she had undergone IPL treatment. Mrs A asserted that there was "no discussion about the nature of the procedure or discussion of the risks or benefits", and she does not recall being provided with any documentation.
48. In contrast, the clinic told HDC that Mrs A underwent a laser treatment, and said that the beautician did have a discussion with Mrs A about changing the service from IPL to laser given her skin tone. The clinic provided documentation to HDC (the Laser Hair Removal Treatment Record and the Laser Treatment Log), which suggests that the clinic carried out a laser treatment. On the evidence before me, in particular that Mrs A purchased a voucher for IPL treatment, and that in later text conversations with the clinic she indicated that she believed she had undergone IPL treatment, I consider it is more likely than not that Mrs A was not aware that she had received laser treatment.
49. Ms Thompson considers that if Mrs A was not provided with an adequate explanation from the clinic prior to the treatment, as to whether she would be receiving IPL or laser treatment, this would amount to a moderate to severe departure due to the fact that IPL and laser treatments are not the same, and because "lasers present different risks to IPL [and] the

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<sup>7</sup> The objective of the standard is to "specify requirements for the safe use of laser and intense light sources, including intense pulsed light (IPL) for diagnostic, cosmetic and therapeutic uses in health care facilities ... and the cosmetic industry".

client has to be fully informed to make the decision on whether to go ahead with the treatment”.

50. I agree with Ms Thompson that the client must receive the correct information, including an assessment of the expected risks, side effects, and benefits of the treatment to be provided, in line with the requirements set out in the Code of Practice. I am concerned that Mrs A was not taken through a full consent process related to the laser treatment session.

### **Documentation**

51. The clinic provided copies of its Client Record form, IPL Laser Consent form, Laser Hair Removal Treatment Record, and the Laser Treatment Log. None of the documents make clear the name of the beautician who carried out the treatments. The Client Record form was incomplete — specifically no information was documented regarding Mrs A’s medical history and whether she was on any medication, and no information was recorded about her skin type. As mentioned above, the clinic provided a copy of an “IPL Laser Client Consent” form despite Mrs A likely having received a laser treatment. The clinic also failed to provide copies of its policies or the outcome of Ms C’s investigation into what happened to Mrs A.
52. Ms Thompson advised that the clinic’s records were incomplete and, in addition, there was no incident report documenting what happened to Mrs A. Ms Thompson explained that the reason it is important for a beautician to complete a consultation form is because IPL and laser treatments generate significant heat to the skin, and, as a result, the beautician needs to know whether the client’s skin will be able to cope with the heat without any significant side effects. Ms Thomson highlighted that obtaining information about whether the client is taking any medication is “one of the most important aspects of the consultation as some medications make the client photosensitive” and, as a result, make the client more susceptible to burns. Ms Thompson further advised: “If the client did not fill out any forms and medications were not discussed, then this would be poor protocol, and the clinic protocols and staff training must be amended.” Ms Thompson considers there to have been a severe departure from the accepted standard of care because of the lack of documentation, and for failing to clarify with Mrs A whether she was taking any medication.
53. I acknowledge the clinic’s explanation that the Client Record form was incomplete because Mrs A had advised that “she is a [health professional] and knew the content of the form, and there was no content to fill out”. However, the obligation to complete documentation is on the provider of services, and the clinic should have had policies in place to ensure that staff knew the importance of filling out the consultation forms correctly prior to the treatment, and the importance of ascertaining whether Mrs A was taking any medication. I am critical that the documentation relating to Mrs A’s appointment was incomplete.

### **Conclusion**

54. I consider that the clinic did not have in place appropriate policies, and did not support and educate its staff adequately to provide services of an appropriate standard.

55. Right 6(1) of the Code of Health and Disability Services Consumers' Rights (the Code) gives consumers the right to be fully informed, and to "the information that a reasonable consumer, in that consumer's circumstances, would expect to receive". This includes information about the proposed treatment and the options available, including the risks and side effects of each option. Mrs A was not provided with sufficient information to make an informed choice about the procedure she was to receive. Accordingly, I find that the clinic breached Right 6(1) of the Code. Consequently, Mrs A was not in a position to make an informed choice about her treatment, and I find that the clinic also breached Right 7(1) of the Code.<sup>8</sup>
56. In addition, consumers have the right to have services provided that comply with legal, professional, ethical, and other relevant standards. The clinic, as the employer, had a responsibility to ensure that its staff were aware of, and complied with, the requirements of the Auckland Council Health and Hygiene Code of Practice,<sup>9</sup> in particular that providers identify and record the customer's medical history and suitability for the service, and that the customer sign a consent form and receive written advice regarding the precautions and post-service procedures appropriate to the procedure. Accordingly, I conclude that the clinic also breached Right 4(2)<sup>10</sup> of the Code by failing to ensure that services were provided to Mrs A in accordance with relevant standards.
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## Recommendations

57. I recommend that the clinic:
- a) Provide a written apology to Mrs A for its breaches of the Code. The apology is to be provided to HDC within three weeks of the date of this report, for forwarding to Mrs A.
  - b) Develop a system for the clear identification of which employee has performed which treatments, and report back on this to HDC within three months of the date of this report.
  - c) Ensure that all relevant staff undertake further training on the Auckland Council Health and Hygiene Bylaw 2013 and associated Code of Practice, and the Australia New Zealand Standard (AS/NZ 4173:2018), and create policies for staff to follow in line with these standards. The clinic is to report back to HDC on this within three months of the date of this report.

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<sup>8</sup> Right 7(1) states: "Services may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this Code provides otherwise."

<sup>9</sup> See Appendix B.

<sup>10</sup> Right 4(2) stipulates: "Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards."

## Follow-up actions

58. A copy of this report with details identifying the parties removed, except the expert who advised on this case, will be sent to the Ministry of Health and the New Zealand Association of Registered Beauty Professionals, and placed on the Health and Disability Commissioner website, [www.hdc.org.nz](http://www.hdc.org.nz), for educational purposes.

## Appendix A: Independent clinical advice to Commissioner

The following expert advice was obtained from beauty therapist Ms Heather Thompson (attachments not included):

“I have been asked to provide an opinion to the Commissioner on case number C19HDC02118, and I have read and agree to follow the Commissioner’s guidelines for Independent Advisors, and I am not aware of any conflicts of interest.

As the director of the IPL and Laser Training Academy and owner of a laser clinic, I have 30 years’ clinical experience using both lasers and IPL on clients. Treatments with this technology include hair removal, pigmentation and redness reduction, skin rejuvenation and tattoo removal. My qualifications include international accredited Beauty Therapy as well as multiple international qualifications in laser and IPL treatments (attended at overseas institutions). I train clinics in IPL and Laser hair removal, IPL skin rejuvenation and Laser tattoo removal, either at my training school or I attend clinics for training on their systems. As I have been to many clinics across NZ I feel I have a very good understanding of how other clinics operate and the types of systems they use.

My referral instructions from the Commissioner are as follows:

**Background** [Mrs A] presented to [the clinic] on 29 October 2019 for IPL laser hair removal on her underarms. The consumer reports that the machine was set to the highest setting and that upon returning home she felt a burning sensation and experienced redness. She subsequently suffered burns to her underarm area.

**Expert advice requested** To review the documentation and advise whether you consider the care provided to [Mrs A] by [the clinic] was reasonable in the circumstances, and why.

The facts as I understand them are the client has made a complaint against [the clinic] for burns she received after her IPL hair removal treatment on her underarms. Burns appear on both underarms. Images have been provided.

[The clinic] refer[s] to her treatment as Laser depilation using 808nm laser.

I can see a discrepancy in the client and clinic statements to begin with as IPL is not laser. The client believed she had purchased, and was to receive, an IPL treatment for hair removal, where the clinic documentation refers to the treatment as Laser hair removal. Both treatments have differences in the wavelengths used, settings and energies used, and in the way the treatments are performed. Please see **attachment #1** outlining the theory of IPL and Laser when it comes to hair removal.

There are a few reasons why the skin could burn from a laser or an IPL hair removal treatment. As we have not been provided with copies of the forms documenting the treatment parameters and treatment result or side effects (any noticeable redness or

burns on the skin) I will explain the differences in both laser and IPL treatments; how they work and how they are performed, and how both can lead to over heating the skin which then can lead to a burn.

1. **Client suitability.** Firstly, if a clinic is using an IPL or Laser for hair removal, testing for the correct Fitzpatrick of the client's skin is critical. Standard procedures for a consultation cover skin colour testing either by the Fitzpatrick test **attachment #2**, which is usually part of the consultation form, and/or melanin testing tool. The skin colour is the most important part in deciding if the client is suitable for the treatment. IPL systems use wavelengths of 610nm, 640nm, 690nm, commonly for hair removal. These work very well to destroy the stem cells responsible for growing hair in the hair follicle. This is due to the selective photothermolysis property of the light; the light converts to heat when it 'sees' the dark hair. This is the same principle that lasers use, but with IPL, the wavelengths penetrate shallower into the skin compared to lasers for hair removal, and as a result IPL light 'sees' more melanin; ie the IPL light sees olive or darker skin more. The IPL light cannot tell the difference between pigment in the hair and pigment in the skin, and if the skin is quite dark, the skin attracts too much light that leads to overheated skin that then can lead to pigmentation change or burns. This is often a concern for clinics that use IPL for hair removal on olive skin clients. IPL systems can and do safely treat darker skin types if the correct setting parameters are selected for particular skin types (colour).

2. A note on wavelength. Often IPL systems have wavelengths used for skin rejuvenation treatments and these are usually in the 490nm, 530nm range. These wavelengths see a lot more melanin than the hair removal wavelengths and as such should not be used on any darker more olive skin types. If the clinic did indeed use IPL and they used a skin rejuvenation applicator or wavelength instead of the hair removal wavelength or applicator, then this would be a strong indication for burning a darker skin colour. Our client has mentioned she is of ... origin, which commonly has a skin type Fitzpatrick 4–5.

3. Diode lasers 808nm are becoming more commonly used for hair removal as this wavelength is firstly; slightly deeper into the skin than IPL, and secondly; 808nm does not see as much melanin as the IPL wavelengths for hair removal do. Hence is considered that bit safer for olive skin types.

4. **Consultation form.** All clients must undergo consultation which includes discussion on the treatment, how lasers or IPL work, hair growth cycles (if it is a hair removal consultation) how many treatments the client is likely to need, the aftercare, the sensation, safety in the room ie safety glasses to be worn etc. The consultation form **attachment #3** is to be signed by the client and therapist prior to any treatment taking place. The form focuses a lot on the health of the client and any medications they may be taking, or have recently stopped taking. Because IPL and Laser treatments need to generate significant heat in the skin to destroy stem cells from the hair follicle, it is important the therapist knows the client's skin will be able to cope with the heat without any significant side effect ie post inflammatory pigmentation or burning.



**5. Medications.** There are certain medications that contradict treatment ie the treatment should not be performed if the client is taking certain medications. The consultation form should have space and questions relating to this. It is one of the most important aspects of the consultation as some medications make the client photosensitive. Photosensitivity relates mainly to sunlight — UV light. IPL and Laser treatments utilise visible light (sometimes into the infrared spectrum) but diode 808nm and IPL are all visible light. Photosensitising medications will make the client's skin sensitive to visible light also, and the energies used may end up resulting in a higher skin reaction. If the client did not disclose on the consultation form she was taking medications, especially photosensitising medications; Roaccutane especially being the worst, even antibiotics may have a photosensitising effect in some people, then was treated with IPL or Laser (on all the correct settings) this could result in skin being burned, the therapist would not be at fault, as she didn't know. If the client did not fill out any forms and medications were not discussed, then this would be poor protocol, and the clinic protocols and staff training must be amended. Unfortunately we do not know if forms were completed, as we have not been given the records of these.

**6. 'Put the setting to the highest level'.** In the client's complaint she referred to being told by the therapist she will be treated on the highest level. If this was the case and the client was treated on the highest level at her first treatment, with IPL or Laser, then this is not correct treatment protocol. Often a test patch is recommended before treatment, to determine whether the client's skin is safe for treatment. This is something that may be recommended by manufacturers and in training, but in reality may not happen. A test patch allows time for any change in skin colour to become apparent. Fitzpatrick 4 and 5 may take around 6 weeks to fully show negative side effects of laser or IPL treatment heat on the skin; ie pigmentation change or burns. The clinic states 'in the treatment site of a small piece of skin test spot. Observe the test response and select the appropriate treatment parameters'. The correct protocol for this client's skin colour is to leave the client for up to 6 weeks post test patch before beginning treatment. Most commonly and in reality a test patch is left for 24–48 hours, or one week before treatment.

All IPL and Lasers have a range of energies that can be used. This is referred to as the Fluence. The determining factors would be — client skin colour (Fitzpatrick), what treatment number this is, how much and what type of hair — thick medium or fine hair, area on the body to be treated, and size of the area, along with the results of the client consultation form, recent sun exposure etc. The complete treatment settings (of which 'energy' is only one part) will be different whether it is IPL or Laser. I will outline each.

#### **IPL**

- **Skin colour;** IPL and laser systems often, on the treatment screen, have either images or numbers that refer to the skin colour — the Fitzpatrick of the client. The therapist selects the appropriate colour of the area to be treated. The system settings change to be safe for this skin colour. The IPL does not control how much energy is to be used. The therapist selects this. The manual may give you guides to this energy for different skin colours and hair conditions. With underarms, and some

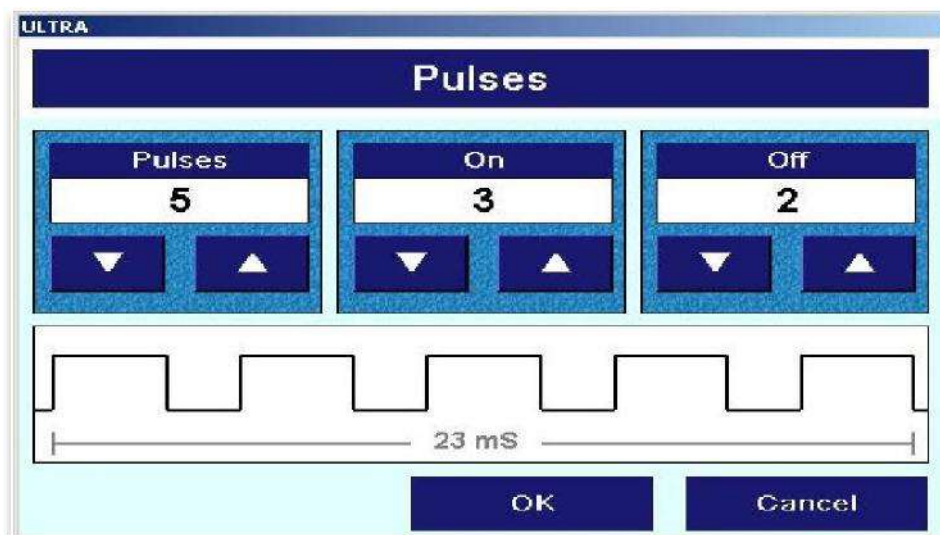


other body areas, it is not uncommon for some clients to have a darker skin colour compared to the skin colour on the rest of their body. The setting should reflect the actual skin colour on the area to be treated. So where the client may have selected or been tested to be a certain skin Fitzpatrick, the skin colour on the underarm is darker. The therapist should choose a darker Fitzpatrick (that corresponds with the under arm colour) on the setting screen, or increase the thermal relaxation time, or both.

- **Hair type;** often there is a choice of hair types — thick, medium or fine (thin). Selecting the hair type allows the machine to alter the ‘pulse width’. The pulse width is the time the light is heating the target ie the hair. Too long heating on darker skins can lead to overheating the surrounding skin and pigmentation change or burning the skin. It’s also seen with some IPL machines the manual will tell you what setting you chose depending on the skin type (colour) and the hair condition. This setting is called the pulse train and includes pulses, pulse width and thermal relaxation time. This should not be altered as it is the manufacturer’s recommendation.
- **Thermal relaxation time;** this is the period of time between each pulse and it directly relates to the skin colour. If you have selected the correct skin colour the IPL selects the thermal relaxation time. If the system requires the setting to be manually adjusted, and the thermal relaxation time is not selected correctly then the skin may over heat and that can lead to pigmentation or burning issues in the skin.
- **Fluence** — Joules/cm<sup>2</sup>. This is the amount of energy that the IPL will heat the area for, at each pulse. Often with IPL systems there is a range anything from 8 J/cm<sup>2</sup>–50 J/cm<sup>2</sup>. The manual should tell therapist the ‘range’ which is safe for that skin colour. Again if this is altered beyond the recommendation it might not be safe. Unfortunately with a lot of systems on the market especially Chinese imported systems, there is little training (if any) from the supplier and little guidance as to what is a good energy to achieve result. Hairs can die with low fluence and most often a therapist never needs to go to ‘full power’. These settings parameters must also be documented on the client form for the next appointment and if another therapist is to treat this client. I have experience where clinics treat clients on maximum energies due to the fact the client is not getting the desired results. This is problematic as it indicates to me the particular IPL is not working properly. Calibration is necessary to check this, and it is a requirement in Auckland only, and not required or necessarily recommended anywhere else in the country. It is not legislation that these devices are tested.
- **A NOTE ON FLUENCE AND CALIBRATION. Auckland City Council Bylaws requests a calibration be done for all IPL and laser treatments. This is a thermal test that measures what energy is being released from the applicator. If a treatment is being**

done on 10 J/cm<sup>2</sup> for example the calibration test should read 10 J/cm<sup>2</sup> + or – a variance of 2%. Attachment #4 – ACC Bylaws<sup>1</sup>

Does this clinic have this calibration test done yearly? If all protocols were followed correctly and the client still burned, then the calibration is the first thing that must be carried out to check the performance of the IPL.



An example of the pulse settings and elements of a particular IPL, that can be selected and changed by the therapist that affect the result of the treatment and how the skin reacts to the treatment. If all of these elements are not fully understood and settings are adjusted beyond the manufacturer's recommendations in the manual, then skin burns can happen.

## LASER

- **Skin colour;** Due to the standard 808nm wavelength of the diode lasers this allows for a safer treatment for olive skin types due to this wavelength having a lower melanin absorption meaning it doesn't see the melanin in the skin as much as say an IPL wavelength of 640nm for hair removal may. That doesn't mean it is totally safe if the wrong setting is used. Most lasers have the same Fitzpatrick selection that IPL does ie; Fitzpatrick 1–6 with 6 being the darkest of skin colours and not recommended to treat with either technology.
- **If the setting is correct the skin can still be burned with the wrong technique.**

## TREATMENT TECHNIQUE FOR HAIR REMOVAL

- The advantage of lasers now available in the aesthetic hair removal market, is their speed to complete a treatment. Where an IPL may take upward of 1.5 hours to

<sup>1</sup> Included as Appendix B: Relevant standards.

complete a full leg (both legs) treatment, a laser can do this in around 20–30 minutes.

- For ease of understanding I will talk about IPL hair removal technique first, then the laser.

### **IPL TECHNIQUE**

- Basically the energy from an IPL is delivered onto the skin in one ‘zap’. This zap or pulse can be divided into smaller pulses to spread the heat over time and allow for cooling. The gap between the pulses is called the thermal relaxation time. Without this flexibility to control the heat on the skin it would create too much heat and could not be tolerated as well as leave marking, burning, pigment change etc.
- Prior to any treatment for hair removal the hair must be shaved to the skin (the client often can do this at home). There must be no length of hair above the skin. If there is and this is heated it can result in overheating the skin and damage to the applicator glass block.
- Ultrasound gel is then applied to the area — 1–2 mm thick. This must be a clear gel, not a blue gel or the green aloe vera gel. Any colour can divert the light to heat up the gel and hence transfer the heat to the surface of the skin.
- The process of treatment using IPL is what can be referred to as a ‘stamp’ method. The entire area is covered methodically in such a way that the applicator footprint — or glass block — is placed on the skin and the energy is released, then the applicator is lifted and moved next to where it was before, placed on the skin and the energy released and on and on until the entire area is covered. Best practice when treating larger areas such as legs is to mark out the area using a white pencil or yellow highlighter pen, into large squares and then the operator ‘fills in the square’ line by line, then moves to the next square. Hereby not leaving any lines or gaps which results in untreated hairs. One ‘stamp’ with one pass; Never overlap the placements and never more than one pass.
- The ultrasound gel is removed, skin is dried, and sunblock may be applied if the area is to be exposed to the sun.

### **LASER TECHNIQUE**

- All pretreatment processes are the same as with IPL — shave hair, ultrasound gel is applied.
- Lasers can be used in ‘single or slow mode’ and is the same ‘stamp’ method as IPL. Usually this would be for a small area such as upper lip or chin. In the slow mode all of the energy selected is released at the one time, hence again as with IPL no going over areas more than once. This stamp method could be performed on any area of

the body with laser, but the advantage of laser is that it offers a speed or fast method, preferred for larger areas such as legs and back and underarms.

- The therapist on deciding to use the fast method selects this on the laser screen. This then automatically changes the settings in the laser. For instance, on the 'stamp' or slow mode the energy or fluence may be 20 J/cm<sup>2</sup>. In the fast mode the protocol would be to go over the area multiple times — possibly 5 times (for this example). If you were to use 20 J/cm<sup>2</sup> with 5 passes there would be incredible pain and the skin would result in being burnt. You are effectively giving the skin 100 J/cm<sup>2</sup>. This is never done. The advantage of laser is to use lower energy and slowly build up the heat with the multiple passes. In the laser would — on selecting fast mode — drop the energy to say 5 J/cm<sup>2</sup>, and with the 5 multiple passes has raised the temperature slowly in the skin but in fact the client has been given a higher treatment resulting in 25 J/cm<sup>2</sup> being delivered to the area. This method is often marketed as *Painless Hair Removal*. But if the energy was too high to begin with and the therapist did too many passes then the end result could be too much heat in the skin and that would potentially result in a burn.
- It is really important in this fast method that the area is covered once fully before you do the subsequent passes. The skin cannot be treated all 5 pulses at once in the same spot, then move on. It is still one pass at a time with laser.

From the photos of the client's underarms, and because we have no clear indication from the clinic how the treatment was performed, from my experience in seeing burns, there could be a few scenarios as to how these burns occurred;

- I. The most significant burn is at the bottom of the client's underarm area — on both sides. I'm thinking if the therapist used the fast mode with a diode laser, then they stopped in this area and allowed more than one pulse on this spot.
- II. If the therapist used the single shot mode or 'slow' stamp mode either a laser or an IPL it does look like multiple shots on this one burned area at the bottom of the underarm. As mentioned previously consecutive multiple shots on the same spot, is not correct protocol.
- III. There is evidence of post inflammatory pigmentation over the entire area, which has reduced with time, — which is an indication of the entire area being treated on either too higher fluence — J/cm<sup>2</sup>, or the settings pulse train was not correct for the client skin colour.
- IV. This could be a result of the wrong selection of skin Fitzpatrick type on the consultation form for this client, which leads to the wrong selection of energy and pulse setting on the machine.
- V. When the treatment begins it is good practice to ask the client how they are feeling. Is the treatment painful or does it feel ok. IPL does feel worse than laser. A hot flick of a rubber band feeling, where laser is more of a warm prickle feeling.

Most of the time the client does feel something, and best practice would be to check with the client. Especially with olive skin caution is needed, and a treatment that is being done with too high energy or the wrong technique, or the wrong settings, the client does feel it. Often you see the client will jump, or pull away from the applicator on the skin once the pulse has been fired. These would be signs to the therapist that the client is feeling uncomfortable. The correct protocol would be for the therapist to stop, look at the skin and ask how the client is feeling. It's useful to ask the client to tell them how it feels out of 10, if 10 was maximum pain. Then the therapist can assess their protocol and either stop treatment or adjust the settings. As there is no copy of the treatment records outlining what happened during the treatment, I don't see there was much care taken with this treatment; either the therapist didn't ask any questions during treatment, or did not observe the skin's reaction, or indeed see the client's reaction. With this type of injury the client would have felt it at the time.

- VI. One other cause resulting in skin being removed from the burn area, as per the photos, is clothing has rubbed the burn, or it has been soaked and the skin has come off. This might suggest no aftercare instructions were provided, or they were not read. The clinic did state it provided the client with after treatment recommendations. These are general after care guidelines, and not necessarily complete for laser burns.
- VII. The client has not mentioned she was given any advice re post treatment at the consultation, written or otherwise.
- VIII. This type of reaction in my experience happens immediately. The client would have been feeling the heat and would have seen the burn that day or the next, depending on the time of the treatment. The burn and side effects (potentially blisters, swelling, colour change etc) gets progressively worse in the following 3–5 days.
- IX. The clinic stated it was not until several weeks after the treatment did they know of the client's side effects and that was an email from the HDC.
- X. The clinic stated on receiving the email contacted the client immediately and gave her 'the best nursing advice' but didn't disclose what that was. With a burn of this nature you don't soak it; ie get it wet in baths or a spa, don't wear clothes that would rub the area, pick at any scabs, don't use deodorant on the skin or shave the area etc.
- XI. The client says she was not happy with the clinic's response. She states they wanted to do further treatment for pigmentation. It is not stated what type of treatment. Laser or IPL for this type of pigmentation is not recommended. It would in fact make it worse.

- XII. The clinic states the client has continued to have hair removal treatment and is very happy with the service and has no abnormal reaction. No timeframe is stated here, and is in conflict with what the client says. The client states she 'wouldn't go back'.
- XIII. 'The 808 Laser standing instrument' is a strange term which I believe relates to a Diode Laser 808nm used for hair removal. I see a lot of devices manufactured in China or Korea coming into the country being used in clinics. These devices have no training aside from a manual (often in badly translated English), possibly a video to show the owner how to fill it with water (but not the type of water to use) very little settings guidelines, poor energy recommendations as per different skin types, and no hands on training! From the copy of the certificate of the therapist provided by the clinic, it was generated in Hong Kong, by the manufacturer of the device. Did the therapist go to Hong Kong for training? I'm not so sure. The name on this certificate doesn't match with the Beauty Specialist Diploma. Beauty therapy training did not, in 2011, include IPL or laser so even a qualified and experienced beauty therapist cannot operate these devices without specialised training.
- XIV. When using Lasers or IPL in New Zealand even though our regulations are very loose, we have only the Australia New Zealand Standard AS/NZ 4173:2018+A1 (**attachment #5**) to abide by. It covers laser and IPL safety although it is not specifically for aesthetic treatments. The theory of light and safety is the same across all laser industries, and this is something I recommend to all clinics to at least do this course. I don't see evidence this was completed by the therapist or the clinic.

### IN CONCLUSION

I have made statements as relating to specific elements of the treatment as I see it that may have resulted in such a burn. With limited evidence in terms of client consultation forms being provided and conflicting statements from the clinic and client, I cannot be exactly sure as to how it happened. But with experience over the years I have come to the conclusion that it was lack of understanding of light based technology, lack of correct treatment technique, and experience in treating darker skin types that led to the result of these burns on the client's underarms. It could also be a new device to the clinic (often we see [vouchers] advertised as the clinic and therapists practise their new device). The burns may also be caused by a lack of clinic protocols when it comes to documentation and procedure. All clients must undergo a consultation and fill out and sign a consultation form.

Education by the clinic needs to be gained to understand the role of medications and client's skin colour play in the treatment process, and what constitutes a contraindication. This includes laser safety as per the Australian and New Zealand standard, as well as possibly a refresher course to remind everyone of what is correct protocol and client selection.

I can't ignore the fact that the brand of IPL/Laser used in this clinic may also have played a part in the burn. There is no regulation in NZ for importing these devices and with device testing, no local support and back up or training mandated for clinics, we have no way to control the industry and help prevent negative side effects on the skin.

Heather Thompson  
Director  
Rejuv Ltd  
IPL & Laser Training Academy

### **Attachment 1: Overview of IPL and Laser technology**

#### OVERVIEW OF IPL AND LASER TECHNOLOGY

To begin with, IPL is not laser.

IPL — the beam of light is polychromatic — many wavelengths, divergent — spreads out as it travels, and is incoherent — each particle of light (photon) has its own agenda if you like, so the light just goes all over the show.

Laser — standing for Light Amplification by the Stimulated Emission of Radiation, is the complete opposite in fact. The light is monochromatic — single wavelength, collimated — like a column of light similar to a rod if you can imagine that, and is coherent — which means the light travels with the photons all in order and traveling at the same speed and in the same time.

I don't like to think of laser as being more 'powerful' — it can provide some advantages that IPL can't, it is not about the 'power', treatment success is based on wavelength and the pulse setting parameters, and the fundamental quality of your device.

#### WAVELENGTH and penetration into the epidermis and dermis

Hair removal can be performed with IPL with applicators or filters commonly in the 610 nm, 640 nm or 690 nm wavelengths. Common lasers use wavelengths at 755nm, 808nm or 1064nm for hair removal. We are not talking about one being stronger than the other here, each of these wavelengths have specific effects on the skin and hair. IPL light energy travels more shallow into the dermis and lasers are able to go deeper into the dermis. The dermis is where the hair follicle sits, so we need to reach it first and foremost. We also know that hair is a varying depth in the dermis whether it's terminal or vellus hair.

#### ABSORPTION

All light based systems whether IPL or Laser are based on the absorption property of light. This is called selective photothermolysis — the light needs to be able to 'see' the hair. That attraction to the melanin in the hair converts light into enough heat energy to kill the stem cells in the bulge of the follicle. Once this happens the hair follicle can no longer grow a hair. So having this knowledge we need to know the wavelengths we select will in fact see the hair. Obviously grey, red and blonde hair don't have the target



chromophore melanin, so are 'invisible' to IPL and laser light. IPL wavelengths even though they may be more shallow in the dermis than the laser, IPL wavelengths will see more of the hair melanin, BUT they also see more melanin in the skin. Lasers and IPL do not know the difference between skin and hair and this is where the settings you choose on your IPL are crucial to the safety of your client's skin. When choosing an IPL or using your IPL you really must understand this element of your treatment — no one wants to burn their clients.

You should trust your supplier has the clinical experience, is available to answer your concerns about a treatment, and that you look for quality. It's not about pushing a couple of buttons and wham bam it's done. There is a lot to think about and to understand.

Lasers also need to have melanin as its target chromophore (still no blonde hairs I'm afraid) the wavelengths allow for deeper penetration into the skin so fantastic for deep and strong 'stubborn' hair. Lasers for hair removal don't quite see as much melanin as the IPL wavelengths, which means lasers are safer on darker Fitzpatrick skin types; less light being attracted to the actual skin. So thinking about your client skin types may determine whether you look at IPL or laser for hair removal.

#### TREATMENT SPEED

This is where the laser has the advantage. We can treat whole backs or full legs in around 20–30 mins where your IPL may take around 60–90 mins. Lasers have the ability to work so fast that in our clinic and the training academy working with the Formatk Magma or Alpha diode laser for example, we can treat a 10cm x 10cm area of skin in seconds. If your clinics focus is hair removal, and you are busy with clients most of every day doing hair removal, laser makes sense for your clinic. With up to 10 hz speed provides the clinic with a faster client turnaround, and arguably more importantly, much less sensation for the client — lasers work on the principle of multiple passes on low fluence and can in fact provide a stronger treatment with minimal sensation — and better results.

#### TREATMENT OPTIONS

Lasers for hair removal, do hair removal. IPL have the options of hair removal and skin rejuvenation. Some IPL are just for hair removal but most give you both hair removal and skin rejuvenation applicators or wavelengths. Which is perfect if you are a clinic that wants to offer skin treatments.

The big question really is we want laser hair removal and IPL skin rejuvenation — pigmentation, vascular and full face rejuvenation.

#### SAFETY

A word on eye safety. Eyewear must be worn by *everyone* in the treatment room. Your safety glasses are wavelength and technology specific. That means IPL glasses are not



protecting you from a laser beam of light and laser glasses do not protect you or your client from IPL.”

The following is further expert advice obtained from Ms Thompson:

“Case number C19HDC02118 — Further questions.

*In the event that the client did not receive an adequate explanation/clarification beforehand from [the clinic] as to whether the treatment to be provided was IPL or Laser treatment.*

*I think this is a **moderate severe** departure, due to the fact that IPL and lasers are not the same. The therapist should be advising the client of what they are suggesting/going to do and explain the differences. Lasers present different risks to IPL and visa versa. The client has to be fully informed to make the decision on whether to go ahead with the treatment. Peers may think this is not as severe as I do, and may consider this moderate or even less, but I believe the client must be fully informed, and it also tells me the therapist may not know the difference between the two technologies.*

*In the event that the documentation provided by [the clinic] (and reviewed by yourself to date) is a complete record of all documentation [the clinic] holds on file for the treatment they provided to the client (i.e. if there are no other extant records aside from that which you have already seen).*

*As I have not seen the actual treatment records from the clinic — just a standard description of the treatment, I can't help but think there are no records of the specific treatment, which is a **severe departure** from best practice. How then can the clinic consider the protocol for the client's next treatment or put into practice remedial steps to better train the therapist, or assess the laser/IPL machine in case it is faulty. Peers would agree I think.*

*In the event that the clinic did not ascertain the client's skin type prior to providing treatment.*

*This is one of the most **severe departures** of best practice for laser or IPL treatments leading to the worst-case scenario which is damaged/burnt/scarred skin. It is the fundamental part of the consultation. Peers would agree.*

*In the event that the clinic did not ask the client what medications they might be taking (for example to establish whether any of these medications might cause photosensitivity).*

*This is another of the most **severe departures** of best practice leading to the worst-case scenario which is damaged/burnt/scarred skin. It is the fundamental part of the consultation. Peers would agree.*

*In the event that the client was treated on the highest level at her first treatment, with IPL or Laser.*

*This again is a **severe departure** of best practice leading to the worst-case scenario which is damaged/burnt/scarred skin. Results with a laser or IPL are not based on 'highest energy'. They are a combination of pulse width, thermal relaxation time and pulse numbers, along with the skin type analysis; 'energy' is then used in measured steps along the course of treatments. Peers would agree.*

*In the event that no aftercare instructions were provided to the client.*

*Generally, for hair removal the client really doesn't need to do anything except keep the area out of the sun/apply sunscreen. Skin treatments require more aftercare instructions. Giving the client no aftercare instructions verbally or written could then have disastrous side effects depending on the treatment, so I think giving no aftercare instructions is in the moderate to moderate severe range.*

*Peers would agree."*

The following further expert advice was received from Ms Thompson:

"Health and Disability Commissioner

Advisory report

Complaint: [The clinic]

Ref: 19HDC02118

Thank you for passing on the extra information supplied by [the clinic] regarding the complaint laid by [Mrs A] for burns sustained from her laser hair removal treatment.

I have re read my original response and looked at the new statements from [the clinic], as compared with the information we have from [Mrs A]. I feel there is a discrepancy in the new information presented to us from the clinic.

[Mrs A] has informed us with written statement supported by photos of her burns. She tells us this happened at her first treatment 29 October 2019. [Mrs A] makes no reference to any other treatments, yet [the clinic] has shown us documentation in the form of treatment records, she had consultation and first treatment 29 October 2019, 2nd appointment 12 December 2019 and 3rd on 13 February 2020. These 2 extra treatments I am assuming were laser treatments but all the records show is underarm and experience is normal. IT does show pulse count — which to me refers to the shots recorded on the laser (or IPL if that is what they have used?).

We have been presented with a photocopy of the consultation form the clinic says was completed by [Mrs A]. [Mrs A] states she had no consultation ... and no forms were completed, yet the clinic provides copies of treatment forms. These treatment forms were not sufficiently completed with none of the medical history being completed and as such this is a very serious inadequacy from [the clinic].

As to the multiple treatments, it doesn't make sense that the client has told us she had only one treatment on 29/10/2019 from when she received her burns, and the clinic saying 2 further laser treatments plus remedial treatments (that we have seen no documentation for). As mentioned above the treatment record sheet is not completed sufficiently — no parameter settings were recorded. Insufficient record keeping plus the lack of an incident report is again not good practice at all.

[Mrs A] tells us she discussed the pain level with the therapist and was told it is normal — or something to that effect. On the treatment record there are no notes to this effect. There are ways to adjust the client's comfort levels if they feel too much. Correct training would have helped with this situation. Simply reducing the energy would be one way and we don't see this has happened.

If we believe the clinic saying a further treatment took place 6 weeks post her first, the burns sustained would not have been sufficiently healed to provide a treatment. There would still have been significant post inflammatory pigmentation and probably even some flaky skin still present and possibly redness. A laser treatment should never have been performed. The clinic has failed in its duty of care of the client, being irresponsible to treat over post inflammatory pigmentation. There is also no written energies or settings given for any treatment as mentioned which is a severe departure from best practice as stated in my previous report.

Having looked at the supporting images of [Mrs A's] documentation, I can see only signatures (or initials from the client) and not one of the questions pertaining to her medical history have been ticked yes or no. Verbal questioning is not enough, the client must answer each question in writing yes or no.

[Mrs A] has told us she did not fill out any form and the therapist could speak very little English. This is at odds to what has been presented to us from [the clinic].

The client mentioned she was treated on full power — we don't have that documented. If there was a lack of communication skills from the therapist, we don't have any evidence to what the therapist meant or in fact how she set the laser.

The clinic makes reference to the therapist [Ms C] having had training in VPL and Diode laser. For a start VPL is a branded IPL system Energist IPL, widely used by [other] clinics. It could be that [Ms C] worked for [one of these clinics] (although not the only clinic that has Energist VPL) and gained her experience there. There is no supporting evidence of [the clinic] having Energist IPL, on their website or any other documents I have seen. They did show us a certification of competence of a system which is RF technology (which often is used in combination with some IPL systems but we have no other reference to this system being used on the client). The photo of the system the clinic has presented is a form of diode laser it seems going by the applicator type.

Referring to the system used as VPL Diode Laser is incorrect as they are 2 completely different technologies. My original report mentions that when using these technologies

clinics must ensure to teach their staff to use the right terminology when talking to the client. [Mrs A] tells us no discussions took place, aside from being told (by who we don't know) due to her skin colour they would use laser instead of her purchased IPL [voucher]. I stand by my previous report, that it is unclear — both in the consultation form and the clinic's verbal discussions with [Mrs A], that using the term VPL diode laser is a severe departure from best practice. If indeed they have both systems, how do we know which one was being used on the client? The images point to the diode laser, but the consultation form does not support this.

I agree with [the clinic] that [Mrs A] having purchased an IPL hair removal voucher, was then recommended, due to her skin colour being darker, to have the Diode laser, as it is safer on Fitzpatrick 4. That is commended. Still, [Mrs A] made no mention of having this discussion or any form of consultation including the risks or benefits or either technology.

One fact that is interesting is who actually performed the treatment? [Ms B] or [Ms C]? The clinic has contradicted themselves in this respect. In the end I have the feeling that whoever did do [Mrs A's] treatment, needed more training on the system and on the treatment procedures including skin colours and how to treat darker skins safely. Unfortunately in New Zealand there is no regulation to encourage clinics to get professional training in the use of both lasers or IPL, incredible as it may seem.

I am not certain that [Mrs A] had 3 treatments, or if so what date the burns happened? But she had already made her complaint to the HDC before the clinic documented her 2nd treatment on 13 January or February 2020 (the documentation is hard to read). This is not feeling correct to me.

We have supporting images of txt messages between the clinic and the client. It's hard for me to make out any dates but the clinic it seems were trying to help the client repair the damage caused from the laser treatment. Then it seems there were multiple appointment changes due to client changing dates. [Mrs A] has told us she had post treatment advice but nothing since then. No mention of repair treatment offers. It could be due to the time this has taken she has forgotten.

It's unclear really from the client's version and the clinic's version how the burns were dealt with. It seems the clinic really did try to get the client to come in, but the records are incomplete and there is no incident report supporting the clinic's statements.

Unfortunately as there is no regulation, no one insisting on NZ training for lasers and IPL in the beauty/appearance industry, clinics may think they are doing a treatment right, and in all fairness I am certain no clinic means to burn a client, but it is reckless and irresponsible not to have as much education as possible, which is available here in New Zealand.

I make this report based on over 30 years working as a laser therapist [in clinics], and as an educator for IPL and Laser treatments and technology. I know clients' skins and I know the effects this technology has on them. I also understand the clinic operations.

The records as such do not seem to be completed correctly and dates don't relate to the client's statement of events.

I stand by my previous report and given the new evidence from the clinic I do commend them for trying to make amends with reparative treatments as proven by the text message images presented to us. But we don't know what treatment or when these happened and that is again a lack of documentation which is not satisfactory.

Overall, the accounts offered by the 2 parties are so disparate that a clear judgment is not possible to make with the evidence provided.

Kindest regards

Heather Thompson  
Rejuv Ltd"

## Appendix B: Relevant standards

### Auckland City Council — Health and Hygiene Code of Practice 2013

Auckland City Council publication “Health and Hygiene Code of Practice 2013” states the following:

#### “Part 7 — Pulsed Light and Laser treatment

Pulsed light is a practice using a powerful flash of broad spectrum, non coherent light intended to remove hair and/or for skin photo-rejuvenation, and may include, but is not limited to, Intense Pulsed Light and Variable Pulsed Light. Laser treatment is a practice involving the use of a laser device, which amplifies light and usually produces an extremely narrow beam of a single wavelength (one colour), intended to remove hair and for skin photo-rejuvenation.

Services involving the use of pulsed light and laser treatment have the potential to burn the skin and lead to longer term skin conditions. Pulsed light may be considered to carry a risk of delayed recognition of skin cancers and mis-diagnosing malignant skin lesions, including melanoma. Lasers capable of breaking the skin, such as those used for laser tattoo removal, carry the risk of drawing blood. The use of lasers capable of breaking the skin may be considered to carry a risk of transmitting blood-borne diseases.

The minimum standards contained in this part of the code aim to ensure that operators who are undertaking pulsed light and laser treatment conduct their operations in a safe and hygienic manner so as to reduce risks to public health.

#### Minimum Standard 7: Pulsed Light and Laser Treatment

*All operators must comply with the following standards:*

- *Minimum Standard 1A (Permanent Premises) or Minimum Standard 1B (Mobile or Temporary Premises)*
- *Minimum Standard 2 (Operator Conduct)*

#### *Training in the provision of pulsed light*

7(1) All operators of pulsed light equipment must have the knowledge and skills necessary to provide pulsed light services, including skin type identification and the safe use of equipment, which can be achieved through the following:

- a) National Certificate (or international equivalent) in Electrology, evidence of professional development in pulsed light services, and commercial industry experience of 12 months or more; or
- b) commercial industry experience of five consecutive years or more using pulsed light equipment, and evidence of professional development in pulsed light services; or

- c) evidence of training with a pulsed light training provider, and industry experience of 12 months or more;

*Training in the provision of laser treatment*

7(2) All operators of lasers that risk breaking the skin must comply with Minimum Standard 4: Risk of Breaking the Skin;

7(3) All operators of lasers that risk breaking the skin, including those used for laser tattoo removal, must have the knowledge and skills necessary to provide laser services including:

- a) skin type identification; and
- b) safe use of lasers based on AS/NZS 4173: 2004 and any updates, additions or amendments to that standard; and
- c) commercial industry experience of 12 months or more;

7(4) All operators of lasers that are designed to remove the skin must be a health practitioner and must be trained in the safe use of lasers based on AS/NZS 4173: 2004 and any updates, additions or amendments to that standard;

*Display of qualifications*

7(5) Qualifications must be displayed in a prominent position so customers can read them, and must be in the name of the operator performing the procedure;

*Precautions, consent and aftercare*

7(6) Prior to the commencement of any pulsed light or laser treatment, the operator must:

- a) advise the customer who wishes to undergo such service of the risks associated with the service; and
- b) give written advice appropriate to the procedure to be undertaken, concerning precautions and post service procedures that should be taken by the customer who wishes to undergo the service;

7(7) Before commencing any pulsed light or laser treatment, a customer must sign a consent form including medical history and skin type;

7(8) Before commencing any pulsed light or laser treatment, all operators must identify if the customer is suitable for the service. Any customers with a family history of melanoma must be exempt from all pulsed light and laser treatment;

7(9) All operators must ensure that a patch test, or a trial exposure of a small area of representative skin and hair, is carried out to determine the parameters and to judge how the skin might react to full service. Test patch protocol should include which areas

to test, the pulsed light or laser settings, how long to wait to judge skin response, and how to spot adverse reactions;

*Record keeping*

7(10) All operators must keep records of:

- a) a customer consent form with medical history and skin type;
- b) a record of service including:
  - (i) the date on which the pulsed light or laser treatment was undertaken;
  - (ii) the type of the service;
  - (iii) the location on the body where the pulsed light or laser was undertaken; and
  - (iv) equipment calibration and maintenance;

7(11) Such records must be kept secure and confidential for a minimum of 2 years and made available to the council for inspection on request;

*Health practitioners to treat skin lesions/moles only*

7(12) Skin lesions and/or moles on any customer may be managed and removed by a health practitioner only;

*Medical consent required*

7(13) All operators must obtain written medical consent to undertake pulse light or laser treatment on any customer for the removal of hair from moles;

*Controlled area*

7(14) All operators must ensure there is a 'controlled area' for the pulsed light or laser equipment, which will have:

- a) clear and detailed safety rules which describe how to use the area correctly, any hazards the operator or customer might be exposed to, who is authorised to use the equipment, and what to do in the event of an accident;
- b) no windows to prevent eye damage to any passerby;
- c) no reflective areas such as mirrors;
- d) clear signs or warning lights showing when it is safe to enter or when the laser/intense pulsed light is on; and
- e) suitable door locks or keypads;

*Protective eyewear*

7(15) All operators must ensure suitable protective eyewear is worn by the customer and operator appropriate for the wavelength of light to be used. If the face is being treated the customer must wear opaque metal eyewear; 7(16) All operators must



ensure protective eyewear is either disinfected or, if disposable, completely replaced after use;

#### *Use of pulsed light equipment*

7(17) All operators must ensure the pulsed light equipment is calibrated to make sure that it is working properly and accurately. The wavelength and service parameters of the equipment must be set according to skin type, hair type, test patch results, and previous service settings;

#### *Cleaning and disinfecting*

7(18) All equipment that does not need to be sterile must be cleaned and then disinfected by a thermal or chemical disinfection procedure appropriate to the level of disinfection required and the item being disinfected maintaining the product-specific recommended contact time, to the satisfaction of the council.

### **Additional Standards**

In addition to the minimum standards above, several other legislative acts, guidelines and codes of practice are also relevant:

- AS/NZS 3130: 1995 'Australian and New Zealand Standard for approval and test specification — beauty therapy equipment'.
- AS/NZS 3200.2.22: 1997 'Australian and New Zealand Standard for diagnostic and therapeutic laser equipment'.
- AS/NZS 3760: 2003 'Australian and New Zealand Standard for in-service safety inspection and testing of electrical equipment'. The New Zealand Association of Registered Beauty Therapists does not recommend the use of Pulsed Light equipment that has not been inspected and tested annually.
- AS/NZS 4173: 2004 'Guide to the safe use of lasers in health care'.
- Electricity (Safety) Regulations 2010
- Hairdressing and Beauty Industry Authority UK 'Safe Use of Lasers and Intense Pulsed Light Equipment 2003'.

### **Additional Recommended Best Practice**

#### *Operators should:*

- seek formal instruction in the recognition of skin cancers;
- understand the importance of not treating pigmented lesions about which they have concerns;
- advise customers with such lesions to seek the advice of a registered health practitioner.

*Skin preparation for pulsed light*

The area to be treated should be:

- Cleansed and all make-up removed;
- Clean skin close-up photographed;
- Hair shaved or trimmed for hair removal;
- Adequately chilled.

*Use of pulsed light equipment*

- The light applicator should be placed onto the skin and a short pulse of light released.
- The applicator should be moved to the neighbouring area and the process repeated until the whole area is treated.

*After pulsed light*

- The chilled gel should be removed, the treated area cleansed and soothing cream applied.
- The treated area should be close-up photographed.”