



Title	Use of Class 3b and Class 4 Lasers and Intense Pulsed Light Sources for Cosmetic Procedures in Non-Medical Settings
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Reference	2008-04. ISBN 978-2-550-53964-3. www.aetmis.gouv.qc.ca/site/fr_publications_2008.phtml

Aim

To examine laser and intense pulsed light (IPL) for cosmetic procedures that do not usually require medical diagnosis and may be performed in Québec by operators other than physicians or health professionals without medical supervision.

Conclusions and results

Although scientific evidence is poor, the findings show that Class 3b and Class 4 lasers and IPL sources are high-power technologies entailing risks for operators and their customers, and could lead to serious adverse effects. Also, some cosmetic procedures may overlap with activities reserved for physicians. Québec has a regulatory gap in the protection of customer health and safety, and no professional order regulates the practice of estheticians or other persons likely to use laser or IPL devices. Furthermore, training programs in laser hair removal in Quebec do not cover other laser applications, or the use of IPL.

Recommendations

- 1) Define which cosmetic procedures should come under the Medical Act.
- 2) Establish vocational training and qualification programs for everyone in the personal services sector who, in performing their trade or profession, use Class 3b or 4 lasers, IPL, or other high-power energy source for nonmedical cosmetic purposes, and propose regulations to ensure that the programs are implemented.
- 3) Adapt Department of Education, Recreation, and Sports' vocational training programs in esthetics and hair removal to comply with said regulations for all procedures using Class 3b or 4 lasers and IPL.
- 4) Adapt Personal Care Service Labor Sector Committee's training program in electrolysis to comply with said regulations and develop mandatory vocational training programs for all procedures not under the Medical Act and require the use of Class 3b or 4 lasers, IPL, or any other high-power energy source.
- 5) Inform the public of the risks associated with beauty care services involving the use of lasers or IPL sources, including the risks inherent in these technologies.

Methods

Search in MEDLINE via PubMed and Cochrane Library. Examination of the grey literature to take contextual aspects into account, especially legal and regulatory provisions framing the use of lasers and IPL by nonphysician operators in various countries and regions. Consultation of local experts to validate the contextual evidence and applicability of the ensuing recommendations.

Further research/reviews required

Studies of better methodological quality and heterogeneity on hair and tattoo removal and nonablative skin resurfacing. Systematic reviews on tattoo removal or nonablative skin resurfacing. Scientific studies to determine if an association exists between the frequency and severity of adverse effects and the types of operators using these technologies for the 3 indications studied. Data on the particular types of technologies used, or on the cosmetic procedures performed.